



FRIDAY, NOVEMBER 28, 1879.

Contributions.

Prizes to Road-Masters.

Atlantic & Great Western Railroad.
MEADVILLE, Pa., Nov. 20, 1879.

TO THE EDITOR OF THE RAILROAD GAZETTE:

In a recent number of your paper there appeared a letter

Signal Posts of the Pittsburgh, Cincinnati & St. Louis Railway.

We give this week engravings of the standard signal posts which have been adopted on the above road. The drawings leave no room for explanation, excepting to add the following specifications or directions:

DIRECTIONS CONCERNING SIGNAL POSTS.

Whistling Posts, marked "W," are to be placed at suitable points, not less than 1,350, nor more than 1,600 ft., from the centre of public road crossings, in each direction.

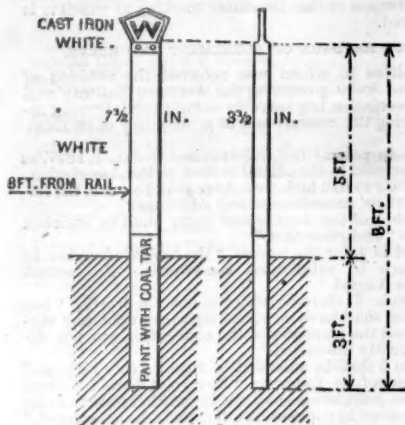
Slow Posts, marked "S," to be placed at near 2,000 ft. as may be practicable from points where all trains are expected to be under full control.

Slow Posts, marked "F S," will be placed the same distance from points where freight trains only are required to be under full control.

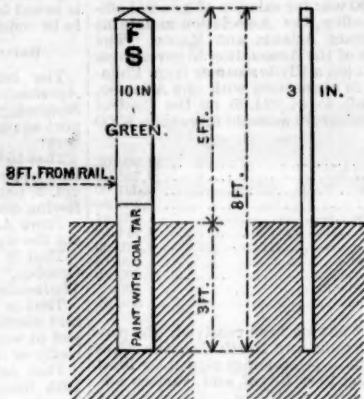
Stop Posts, painted red, with the word "STOP" in white

composing the Southern Railway & Steamship Association, were submitted for consideration of the convention, and were referred by the convention to two committees, one on rates and the other on classification, with instructions to report at the annual convention, on the 2d of October. Owing to the existence of yellow fever in the West, the annual convention was postponed until Nov. 26. At the November meeting a general understanding was made between the Green Line, or Western roads, and Eastern lines, to use the same classification and rates to some points, and certain differences in rates to others. To carry out the agreement, a Rate Committee of ten, with the General Commissioner as Chairman, was appointed to make rates from and to all points.

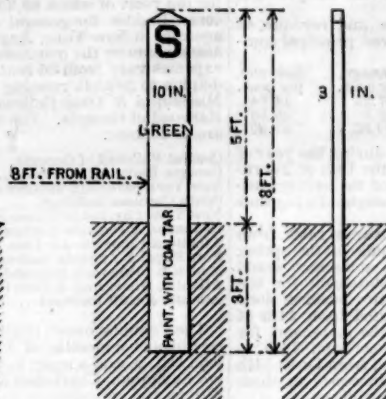
That Committee met at Nashville, Dec. 12, 1878, and worked faithfully for five days trying to reconcile the agreement with the practical workings of the rates, and finally arrived at conclusions and made rates that have since been worked with various modifications from time to time by the



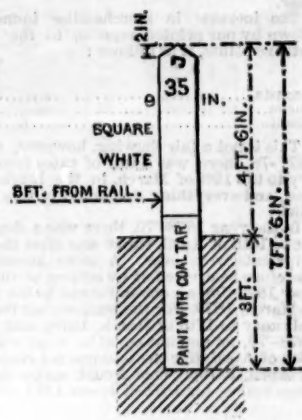
WHISTLING POST.
ON ENGINEERS SIDE.
Fig. 1.



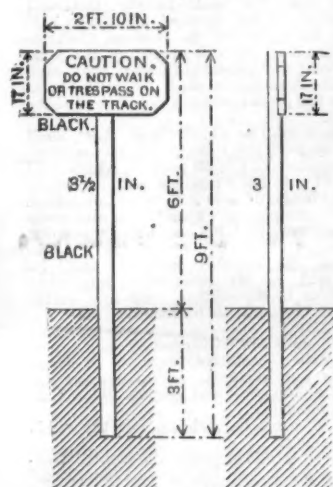
FREIGHTS SLOW,
ON ENGINEERS SIDE.
Fig. 2.



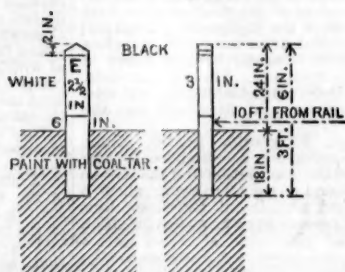
SLOW POST,
FOR ALL TRAINS.
Fig. 3.



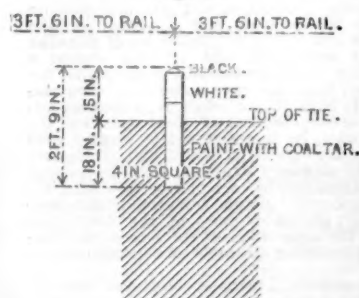
MILE POST.
ON SOUTH SIDE OF TRACK.
Fig. 4.



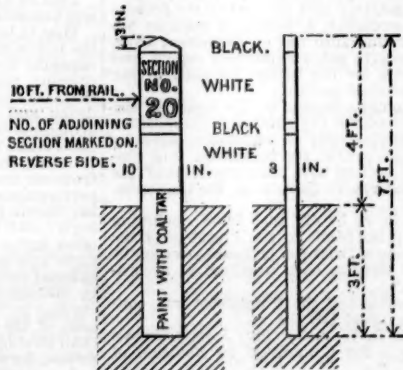
WARNING SIGN.
Fig. 5.



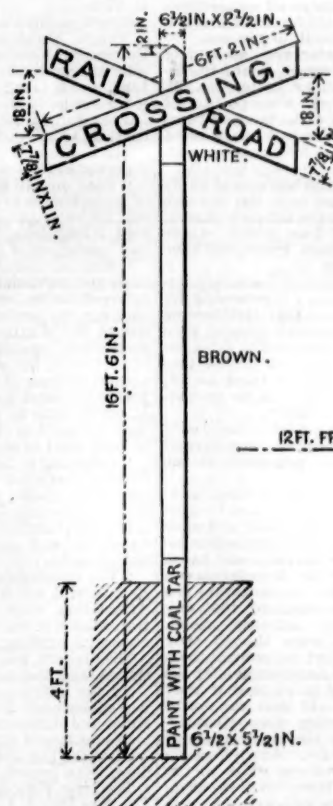
ELEVATION STAKE.
THIS STAKE TO BE USED, WHERE THE ELEVATION
OF RAIL CANNOT BE CONVENIENTLY MARKED
ON TELEGRAPH POLES.
Fig. 7.



CLEARANCE POST.
FOR SIDING.
Fig. 6.



SECTION POST.
THIS POST TO BE USED WHERE THE
SECTION NO. CANNOT BE CONVENIENTLY
MARKED ON TELEGRAPH POLES
Fig. 8.



CROSSING SIGN.
Fig. 9.

STANDARD SIGNAL POSTS:

Pittsburgh, Cincinnati & St. Louis Railroad.

of Mr. Huntingdon, in which he stated that the road-masters of this road received prizes or premiums for excellence in their work.

I wish to state here that at the first annual road-masters' meeting on this road the vote was unanimous against the receiving or giving of prizes.

We consider the practice of giving prizes for excellence in the performance of duty not conducive to the highest order of discipline, and therefore prefer the system here adopted, namely, that of simply naming the order of merit by judges selected from among the engineering department, and accept that decision without jealousy or ill-feeling.

We consider that the best results obtained are through an enduring and lively desire to do our duty, without looking for material rewards.

CHARLES LATIMER,
Chief Engineer.

letters, are to be placed 300 feet in each direction from railroad crossings, when all trains are required to come to a full stop.

Mile Posts, marked with distance from Columbus and Pittsburgh, to be placed on south side of track at even miles from Pittsburgh.

The above, except mile posts, to be placed on engineer's side of track running in the direction in which they are to be noticed, and located 6 1/2 ft. from the rail on embankment, and 8 ft. in cuts.

Southern Railway & Steamship Association.

The list of delegates in attendance at the fifth annual convention in Atlanta, Nov. 5, was published in our issue of Nov. 14. At this convention Mr. Virgil Powers, the General Commissioner submitted the following report for the year ending with August last:

COMMISSIONER'S REPORT.

At the meeting held at Atlanta, Sept. 5 and 6, 1878, rates and classification, prepared by direction of a meeting of the Green Line Executive Committee, and some of the roads

Committee, and have produced satisfactory results, though not always satisfactory to all parties. The Committee met at Greenbrier White Sulphur Springs, W. Va., on the 11th of August, and were in session at intervals until the 15th. They then suggested rates, and I was directed to have them printed and send a copy of proof to each member of the Committee to be examined. Nearly every member of the Committee objected to some of the changes that were made. To remedy the defects, I asked the Committee to meet at Atlanta on the 10th of September, which they did, Messrs. Plummer, Crosby and Hasel being absent, and Mr. Pope being represented by his agent, Mr. Emerson. The Committee organized and adopted rates, and directed me to put them in force, which was done. The cotton rates were put in force on the 16th of September, and the merchandise rates on the 19th of September.

The Piedmont Line refused to adopt the rates thus promulgated and issued rates from and to Richmond, Norfolk, Portsmouth and Petersburg lower than the Committee's rates, and are now working those lower rates. They contend that rates from Richmond, Norfolk, Portsmouth and Petersburg shall be the same as from Charleston, Savannah and Port Royal to Atlanta, and a difference of ten cents only on

first three classes and of five cents on the lower and lettered classes to Augusta. These rates, it was contended by the Committee, were unjust in themselves, and allowed the cutting via Richmond of the Western rates to competitive interior Green Line points.

It was my duty to enforce the rules against the company refusing to protect Committee's rates, but as the annual convention of the Association was so near at hand I deferred, and now submit it for the consideration of the convention, hoping that some proper and just adjustment may be arrived at, so as to prevent a war of rates and large loss of revenue.

The organization of the Association has brought about a uniform classification by which uniform rates can be made. If it had none nothing else, then this would have been an important step gained. I am glad to say, however, that many other very important results have been accomplished.

There has been much less cutting of rates, paying rebates, drawbacks, etc., practiced the past fiscal than any previous year, and more net revenue has been made on the business of the past year than the former year, notwithstanding it was done on rates about 12 per cent. lower than the previous year.

The increase in merchandise tonnage and revenue, as shown by our printed reports, to the three principal competitive points, is as follows:

	Tonnage, per cent.	Revenue, per cent.
Augusta.....	37.25	14.64
Macon.....	42.1	25.56
Atlanta.....	46.93	25.20

This is not a fair showing, however, as during the year of 1877-78, there was a war of rates from the 13th of February to the 18th of March, in the height of the spring business, and everything that could be was brought during that time.

In the year 1878-79, there was a short war on rates, from 1st to 13th of April, which was after the bulk of the spring shipments were over. A more accurate statement would therefore be arrived at by adding to the statement for the year 1877-78, an amount equal to the entire business done in March, 1879, (for the business not reported from 14th of February to 17th of March, 1878), and to the statement for 1878-79, an amount equal to what was done from 14th to 30th of April, (for the business not reported from 1st to 14th of April, 1879). This would make the increase, to those three points, for 1878-79 over 1877-78, as follows:

	Tonnage, per cent.	Revenue, per cent.
Augusta.....	25.20	5.06
Macon.....	32.55	15.85
Atlanta.....	33.77	14.56

The reason that the percentage of tonnage shows greater increase than of revenue, is that rates were reduced on the 15th of August, 1878, about 9 per cent., and again on the 10th of January, 1879, about 13 per cent. below the rates of 1877-78, and the cause of smaller increase of revenue at Augusta than at Macon and Atlanta was that the reduction of rates at Augusta was greater than that at those points. The total increase of tonnage and revenue at all competitive points, represented in full in the accounts for both years, is 30.6 per cent. of tonnage, and 12.6 per cent. of revenue.

For detailed statement of the character and amount of business (merchandise and cotton) performed during the fiscal year ending Aug. 31, 1879, see Circular Letter, No. 32. On the last page of that letter I have given a comparison of the merchandise business to each point for the last two years (1877-78 and 1878-79), in which the increase to each point in 1878-79 is shown in tons and revenue, to which your attention is specially called.

No satisfactory comparison of the cotton business of 1877-78 and of 1878-79 can be made, because only the through cotton was reported and pooled prior to the 18th of March, 1878. Since that time all cotton has been pooled, where agreed on. Cotton rates as fixed have been lower, but have been better maintained than ever before.

This is gratifying, and shows the gradual and constant improvement in the business of the country represented by these competitive points. It further shows that the income of the roads on reduced rates well maintained is greater than on higher rates with occasional breaks; and if the rates are well maintained, they can be gradually reduced as the tonnage increases, thereby giving regular uniform rates to all, with such reductions in rates, from time to time, as is warranted by the increased business of the country.

It is far better that all interests should act fairly and justly toward each other, than that the sharp practices so universal a few years since (and still to some extent practiced) in the railroad management should prevail.

There has also been contentions from time to time as to "divisions of business," "rates of freight," etc., and I regret to see that the Virginia and North Carolina roads, and some of their steamship connections, have banded themselves together to enforce certain demands as to divisions and rates. All such combinations within or without the Association can but result in harm to all interests. Our organization is a voluntary one, and it can hardly be expected that any combined portion can enforce their extreme views, demands or ideas upon the others, even though they may be a large majority making the effort to enforce them on a small minority. The rules of the Association offer the means of procuring justice and equity to all, and if they do not they can and should be made so. If that can not be done, then the road or roads considering themselves aggrieved have the alternative of leaving the Association or submitting for a time to seeming injustice. Any effort on the part of any number of roads to enforce what to the others may seem unjust demands must result in great harm to all. I therefore trust that all parties will exercise prudence and a compromising spirit, and that differences will be adjusted satisfactorily.

For the purpose of securing the return of all pooled business to the clearing-house, I recommend that an agent be appointed at Richmond, Norfolk, Charleston and Savannah, whose duty it shall be to abstract all shipments, daily, in classes, and compare the footings with the railroad books, to see that they are correct, and forward the same to the clearing-house. The agent at Richmond can attend to shipments from West Point, Va., by visiting that point say twice a week. The agent at Norfolk can attend to shipments from Portsmouth. The Charleston agent could visit Wilmington and Port Royal each weekly or twice a month, and verify reports from those points, and the Savannah agent could visit Brunswick for the same purpose.

The first section of the agreement of the Association is as follows: "To facilitate the transaction of business between said parties and other transportation companies relating to such of the freight and passenger traffic in which any one of said parties is directly or indirectly interested," etc., etc. This contemplated the control of the passenger traffic as well as freight by this organization. I therefore recommend that the passenger as well as the freight business be put under the control of the Association, under such rules and regulations as now govern the freight traffic, or such other rules and regulations as may be deemed necessary. The passenger business, as conducted for some time past, has certainly not been very creditable to the railroad management. Although the freight business is not perfect by any means, still it has greatly improved under the As-

sociation, and it can certainly improve the passenger traffic. If no other thing can be done, passenger rates can be made and enforced by all lines in our Association, and violations punished, if it cannot be pooled. Reports can be made to this office of the business of each line, and upon data thus obtained, after a time, proper divisions can be arrived at by compromise and concessions, if it can not be done at once. The fearful loss of revenue in these fights over freight and passenger business loses much more money to each railroad than can possibly be lost by an error in divisions of the business, on full rates. It will, therefore, in my opinion, be best to agree upon divisions as early as practicable, and correct them from time to time, as information is obtained on which they can be corrected. By this course much money can be saved to all interested.

I attach hereto a statement of the expenses of the Association and assessments for same for the year ending Aug. 31, 1879. Respectfully submitted,

VIRGIL POWERS, General Commissioner.

This statement showed a total expenditure of \$28,015.73 for the year, of which \$8,250 was for salaries of general officers. Besides the general office, the Association maintains agencies in New York, Augusta, Atlanta and Macon. The assessments on the members of the Association to cover these expenses vary from 25 cents (on a Clyde steamer from Philadelphia to Norfolk running in connection with the Atlantic, Mississippi & Ohio Railroad), to \$4,924.95 on the Central Railroad of Georgia. The members assessed more than \$500 are as follows:

Central Railroad of Georgia.....	\$4,924.95
Georgia Railroad.....	2,755.60
New York-Savannah steamers.....	2,621.90
South Carolina Railroad.....	2,487.80
New York-Charleston steamers.....	1,631.84
Richmond & Danville Railroad.....	1,211.12
Atlanta & Charlotte Air Line.....	1,210.60
Port Royal & Augusta Railroad.....	696.15
Macon & Brunswick Railroad.....	696.38
Atlantic, Mississippi & Ohio Railroad.....	599.65
Atlantic & Gulf Railroad.....	552.85

The Commissioner's report having been received, the proceedings of a meeting of Virginia and North Carolina lines held Oct. 8, and a reply to these proceedings signed by lines via Savannah, Charleston and Port Royal, and various additions and amendments to agreements and rules submitted by a committee of the Richmond meeting were read and referred to a Committee on Revision of Rules and Agreement consisting of A. Pope, General Freight Agent of the Wilmington & Weldon and Wilmington, Columbia & Augusta roads; E. W. Cole, President of the Nashville, Chattanooga & St. Louis; E. P. Alexander, President of the Georgia Railroad; W. G. Raoul, General Superintendent of the Southwestern Railroad; A. S. Buford, President of the Richmond & Danville; J. B. Peck, General Superintendent of the South Carolina Railroad; and W. H. Stanford, General Freight Agent of the Old Dominion Steamship Company. The recommendation of the Commissioners concerning establishing agencies at Richmond, Norfolk, Charleston and Savannah was also referred to this Committee.

Messrs. Stahlman, Dorsey, Fitzgerald, Talcott, Knox, Rogers and Needham were appointed a committee to consider the agreement between the Association and the Green Line, and if possible recommend measures to bring about a more equitable and permanent adjustment, the Green Line having complained that the present agreement has not been carried out in good faith.

The Committee on Revision of Rules and Agreement, etc., reported as follows, Nov. 6:

"The Committee, to whom has been referred the question of amendments to and a revision of the agreements creating, and the rules governing the Southern Railway & Steamship Association, looking to the more perfect constitution and operations of that body beg leave to report:

"That an examination of the question, and the propositions and communications pertaining thereto, that have been referred to the Committee, require, in its judgment, further time for the performance of that duty, and to that end requests the continuance either of its own existence, or of some other committee similarly empowered, for the purpose of perfecting the whole matter; and that when the present annual meeting of the Association adjourns, it shall be adjourned to meet again on the 16th day of December, 1879, at which time it will receive said committee's report, and that the election of officers for the future Association year be postponed to said adjourned meeting.

"Referring to the recommendations in the report of the General Commissioner, touching the control of competitive passenger traffic, and employment of Association agencies for the reporting of freight traffic, the committee will consider these matters in connection with other revisions of the agreement and rules, and report thereon at the time mentioned in this report.

"The committee beg leave to say that after concluding its labors, it will transmit the result to the President of the Association, with the request that the proposed revision be transmitted in the usual form to each member, in accordance with existing rules."

This report was adopted, and the Committee was continued, and instructed to report Dec. 16.

At the instance of Col. E. W. Cole, Gov. Joseph Brown was substituted for him in the Committee on Revision of Rules and Agreement.

Resolutions of sympathy with Mr. Wm. M. Wadley, President of the Central of Georgia, now suffering from an accident, were passed.

The New York & Montreal City Steamship Co., the North Carolina Direct Line, the Georgia & Alabama Steamboat Co., the Winchester & Alabama, the McMinnville & Manchester, the Atlantic & North Carolina, the Nashville & Tuscaloosa, the Duck River Valley, the Owensboro & Nashville, the Tennessee & Pacific, and the Marietta & North Georgia railroads were admitted to membership.

Colonel Buford called attention to the present tariff on steel rails, and General Alexander offered a resolution, which was amended by Mr. Quintard so as to read as follows, in which form it was unanimously adopted:

"Resolved, That each individual member of the Association be requested to bring what influence he possesses to bear upon his representatives in Congress to secure a reduction of the present enormous, unnecessary and unjust duty upon steel rails, at the approaching session of Congress.

"Resolved further, That the members of this Association sign a petition to Congress, asking that the views above expressed be carried into effect, and that copies of said petition be sent by each member to such representatives in Congress as he may think proper."

The Committee on Agreement between Green Line and Eastern lines reported as follows:

"Your Committee to whom was referred all matters pertaining to the agreement with the Green Line, beg leave to report its inability for the present to agree. And, inasmuch as a meeting of this Association is to be held on the 16th day of December next, your Committee respectfully asks till then to consider the question, and would recommend that the Rate Committee proceed with an adjustment of rates, and that all rates thus fixed be rigidly enforced.

"And we further agree that the concessions heretofore made to the Eastern lines to coast and interior Eastern line

points were intended for the use only of rail and water lines, and any attempt on the part of an Eastern line to work traffic 'all-rail' on Eastern line rates is a violation of the spirit of the original agreement, and should not be allowed."

This report was adopted and the committee continued as requested.

The following, offered by Mr. Stahlman, was adopted:

"Resolved, That the report of the General Commissioner be referred to the Special Committee on Rules, and that its special attention be called to that portion of the General Commissioner's report referring to a failure of certain lines to carry out and enforce the rates of the Rate Committee.

"Resolved, further, That it be made the duty of this Special Committee to clearly define the duties and prerogatives of the General Commissioner and Rate Committee touching the making and enforcement of rates and classification."

The convention adjourned to meet in Atlanta, Dec. 16. Since this meeting the Committee on a Revision of the Agreement and Rules have made the following report, which is issued in advance of the December meeting at which it is to be considered.

REPORT ON REVISION OF AGREEMENT AND RULES.

The committee to whom was referred the revision of Agreement and Rules governing the Southern Railway and Steamship Association beg leave to submit the following report as receiving the concurrence of a majority of its members:

That to the Agreement and Rules revised to Jan. 1, 1877, as they appear printed in the official record of the Association, vol. 2, pages 602 to 619 inclusive, there shall be made the following corrections, amendments and additions:

From Article 1 of the Agreement, there shall be stricken out the words "and passenger."

That in Article 4, for the words, "the first Wednesday in October," there be substituted the words, "the second Wednesday in August."

That in Article 5, there be stricken out the words, "but said convention shall have no authority to act upon any subject in which all the members of the convention are not directly or indirectly interested."

That Article 6 shall be amended to read in the 11th and 12th lines thereof, as follows: "Any road leased by any member of the Association shall not be entitled to vote as an individual member in conventions, but shall be considered," etc., and that to said Article 6 shall be added the following: "Provided, however, that whenever the yeas and nays are called for, or the vote is required to be made by ballot, then such companies shall be entitled to cast one vote for each twenty thousand dollars or fraction thereof, of the revenue allotted to said Company, as shown by the report of the General Commissioner for the year ending Aug. 31 next preceding the time at which the vote is taken; and provided further, that each company, member of the Association, shall be entitled to at least one vote, whether the gross revenue amounts to twenty thousand dollars or not."

That to Article 11 there shall be added, "and there shall be appointed by the President, and ratified by the convention, an Executive Committee of five (5) persons, which shall hold office for like period with the President and Secretary of the Association. The duties of said Executive Committee shall be to supervise the receipts and expenditures and books of the General Commissioner, and his methods of keeping and reporting the accounts of the members of the Association, and to see that the monthly accounts shall be promptly rendered; and in all cases where any member of this Association is dissatisfied with any action of the General Commissioner, such member may appeal from such action to said Committee, and the action of the General Commissioner shall be suspended by such appeal until it is acted upon by the Committee, three (3) of whom shall form a quorum for any business. In all cases of appeal, the said Committee shall meet and dispose thereof at the earliest practicable moment."

That from Article 30 there be stricken out the words "both freight and passenger."

That to Article 22 there be added after the words "General Commissioner," the words "or Executive Committee."

That in lieu of the present Article 34, there be substituted the following: "The General Commissioner is required to organize such system for the rendition of tonnage and revenue reports in the entire territory of this Association, both of divided and undivided traffic, and of the condition and observance of tariffs, as will give him absolute acquaintance with the progress and condition of the Association's affairs, and enable the application of remedies to evils that may arise, and will likewise enable a frequent transmission of current business so early after the performance thereof, that lines may understand their status therein in time to have their conduct regulated accordingly; and to the accomplishment of these ends, and the other duties of his office, he is authorized to employ such force as is necessary, the expense of which, his traveling, incidental and all other necessary expenses, shall be assessed by himself and paid monthly by each member pro rata, according to the gross monthly income, from competitive business, of the company; and all expenses of the Association shall be subject to the supervision of the Executive Committee, for whose information abstracts of expenditures are to be submitted."

That for the present Rule 11 there be substituted the following: "In determining the divisions at any one point, allotments shall be made to the several lines, and not to the initial roads alone, so as to include the subdivision of business."

That from Rule 13 there be stricken out the words, "no through tickets or."

That the following be adopted as Rule 23: "The duration of all allotments of business shall be to the end of the current Association year, and thereafter, until a new allotment is made."

And that in the rules there be incorporated, in their proper location, such as have been adopted at various conventions of the Association, and appear in the records thereof, viz.:

Page 861—"The rate allowable as cost of carriage to roads carrying excess of business shall be 20 per cent. of gross revenue derived."

Same page—"That on all through business that is divided, twenty (20) per cent. of the tariff rates, or such smaller amount as the General Commissioner may find necessary, shall be reserved to the credit of the General Commissioner and treated as an arbitrary amount prior to assessment of the proportions of the lines at interest, and the railway or steamship company making the collection shall deposit the same in some safe bank, to the credit of the General Commissioner, under such regulations as he may enact."

Page 13, new series—"That in all elections of officers, where more than one candidate is presented, said election shall be by ballot, and as each company is called, its representative shall come forward and deposit its vote."

A. POPE, Chairman of Committee.

—Mr. W. P. Jams has resigned his position as Auditor of the Indianapolis Belt Railroad.

Life of Equipment and Superstructure on Illinois Railroads.

Statistics for the report of the Illinois Railroad and Warehouse Commissioners for the year ending Nov. 30, 1879, are now being prepared by Mr. Oberly, Commissioner, and Mr. Charles Hamilton, Engineer of the board, from the returns made by the several railroad companies and receivers of the state. The following table gives the average life, in years, of the plant and material of 29 of the reporting roads:

NAMES OF ROADS.	Locomotives.	CARS.			RAILS.		CROSS TIES.						BRIDGES.				Joint fastenings.	Telegraph poles.	Fencing.
		Passenger.	Stock.	Freight.	Iron.	Steel.	All kinds.	Oak.	Pine.	Hemlock.	Cedar.	Other.	All kinds.	Truss.	Trestle.	Pile.			
Cairo & St. Louis.							3½	6		4½			6½	6	6½	6½			
Carbondale & Shawneetown.							6	6		5				8	8		8	10	10
Chicago & Alton.	15	15	7	7	8	15	7	8											
Chicago, Burlington & Quincy.	15	15	9	9			4½	6		3			6	8	8	5	8	12	10
Chicago & Eastern Illinois.	15	15	5	10	5		5			5			7	7	7	8			
Chicago & Iowa.							5			5				12	7	12			
Chicago & Pacific.	20	12	12	12	6		5			6	6	6							
Cincinnati, LaFayette & Chicago.					10		5	8	3	4	4			8	8	10			10
Decatur, Mattoon & Southern.	12	8		5	12		5	8					6	6	6	4		4	6
Grand Tower & Carbondale.					7		5	8	3	5			7		7	8		6	
Illinois Midland.	17½	16	8	10	10		7	8											
Illinois & St. Louis.					10		7	8											
Indiana, Bloomington & Western.					4		7	6						9	7	10		8	10
Indianapolis & St. Louis.	12	10	5	8	5		7	8	3	3	4			9	7	10		8	10
Lafayette, Bloomington & Mississippi.					10		5	5						10	8	8	12	6	13
Lake Shore & Michigan Southern.	15	20	14	18	5		8	8					12	12	10	12		13	10
Michigan Central.	24	20	10	15	3	9	5½	7		4									
Mineral Point.					10		7	8						8				15	10
Pekin, Lincoln & Decatur.	27	15	12	12															
Pittsburgh, Cincinnati & St. Louis.	12	12	8	10	7		7	7					9	9	9	10	7	11	8
Pittsburgh, Ft. Wayne & Chicago.	20	15	10	10	3		7	5											8
St. Louis, Alton & Terre Haute.	18	15	10	15	10		7	7					7	7		7			8
St. Louis, Rock Island & Chicago.	15	15	9	9			6	4											
St. Louis, Vandalia & Terre Haute.							6	4											
St. Louis & Southeastern.	12	8	7	7	7	20	7½	7½				15	7½	10	7½	7½	10	8½	9½
Toledo, Peoria & Warsaw.	18	15	10	15	8½		8	8					14	15	9	9			
Wabash Railway.					7½		8	8					10	7	10	10		7	8
Wabash, Chester & Western.							8	8											
Western Union.	20	10	10	12	10		7	8		5	5								
Average.	16.01	18.88	9.00	10.8	7.3	4.61	6.48	6.77	3.75	5.41	4.75	9.00	8.33	9.26	7.78	8.45	7.62	9.5	8.65

RAILROAD LAW.

The Indiana Whistling Law Valid.

The case of the Pittsburgh, Cincinnati & St. Louis Co., appellant, against Brown, appeal from the Lake County Circuit to the Indiana Supreme Court, was a suit brought by the appellee to enjoin the appellant from causing the whistles of its engines to be sounded in accordance with the act of March 29, 1879, and such proceedings were had that judgment was rendered perpetually enjoining the defendant from sounding its whistles, except to give one or more short, full and distinct sounds when approaching a highway crossing, and except such whistling as may be necessary and customary in signaling for brakes, switches, side-tracks or danger. The first section of the statute cited is as follows: "That it shall be the duty of all railroad companies, operating in this state, to have attached to each and every locomotive engine a whistle, such as is now in use or may be hereafter used by all well-managed railroad companies, and the engineers or other persons in charge of or operating such engine upon the line of any such railroad, shall, when such engine approaches the crossing of any turnpike or other public highway in this state, and when such engine is not less than 80 nor more than 100 rods from such crossing sound the whistle on such engine attached thereto continuously, from the time of sounding such whistle until such engine shall have fully passed such crossing. Provided, that nothing herein shall be so construed as to interfere with any ordinance that has been or may hereafter be passed by any city in the state regulating the management or running of such engine or railroad within the limits of such city." The residue of the statute provides penalties for failure to comply with the section set out above. Held, The act is valid. It is a police regulation clearly within the scope of legislative authority. To the argument that the constant whistling is a nuisance, it is answered that that which would otherwise be a nuisance, if done under the authority of law for the public good, is justifiable. The legislature must be the exclusive judge as to the distance from the crossing at which the whistle should be sounded, and as to the necessity of a continuous sounding until the crossing is passed. The necessity and propriety of the enactment in question was exclusively for the legislature and not for the courts to pass upon. The law is not unconstitutional, and cannot, therefore, be held void. The judgment below must be reversed.

Evidence in Accident Cases.

The New York Register collects a number of decisions on accident cases, which are of interest at the present time. It says:

"In determining whether declarations of servants and others in reference to the causes of a casualty are competent evidence, attention should be paid to the question how far the declaration was coincident with the scene of the fact illustrated. The following cases illustrate the mode in which the rule of the *res gestæ* is applied to such questions:

INSTANCES OF DECLARATIONS MADE BEFORE THE CASUALTY.

Declarations made by the conductor of the train to a passenger, a moment before the accident, of the bad condition of the road, and his train having run off the track five consecutive times next preceding the present trip, are inadmissible in proof of negligence, either as *res gestæ* or as admissions of an agent binding on the principal (Mobile Railroad v. Ashcraft, 48 Ala., 15, 29); but evidence that said train had run off the track seven or eight times within a month before the accident is admissible (Ib., p. 32).

"In an action against the proprietor of a stage, declarations (which are not part of the *res gestæ*) of the driver, whose conduct is not implicated, that the stage was top-heavy and overloaded, are not evidence for the plaintiff (Maury v. Talmadge, 2 McLean, 157, 159).

"Where a loss of goods has been occasioned by the breaking of a cable and the loss of the vessel, the declarations of the crew, when they were paying out the cable, may be given in evidence as to its soundness (Reed v. Dick, 8 Watts, Penn., 479). In this case it appeared that when the cable was being paid out a rope yarn was observed bound around a particular link to mark it as unsound by a hand who had left the vessel. The master was called to inspect it, and all hands pronouncing it sound, the cable was paid out, and an hour afterward the cable parted, whether or not at the suspected link not ascertained.

"Where the question was the negligence of a boat, the declarations of the pilot are not admissible evidence (Ready v. Steamboat Highland Mary, 20 Mo., 364). In this case the witness testified that 'on the night the horse was lost, witness (a passenger) sat up until 11 p. m., knowing that the mouth of L was a dangerous place on the river. The pilot told witness that he would not pass that place that night. So witness went to bed.' This was held incompetent, on the ground that it was calculated to make the impression that the pilot thought it wrong to pass L. that night: it was therefore hearsay evidence of negligence, and should be excluded.

"In an action against a railroad company for damages for an injury alleged to have been occasioned by the bad condition of their road, the declarations of the engineer of the company, made while actually engaged upon the work, and in respect to its proper construction, were deemed part of the *res gestæ*, and therefore admissible in evidence (Brehm v. Great Western R. Co., 34 Barb., 256).

"A railroad agent's declaration, made while at work on the road, that there was time to do the work before the arrival of a train—Held, admissible (Matteoson v. New York Central Railroad Co., 62 Barb., 364).

DECLARATIONS MADE AT THE TIME OF THE CASUALTY.

"In an action for personal injuries sustained by a passenger during an affray of soldiers on defendants' boat, the warning brought by a sergeant to his superiors in the cabin of the existence of the disturbance, and his excited declaration that a man had been shot, are admissible in connection with other evidence as part of the *res gestæ* (Norwich Transp. Co. v. Flint, 13 Wall, 3).

"In an action against a railroad company for injuring the plaintiff by negligence, declarations of the engineer by whose negligence the plaintiff was injured, made at the time of the injury, are admissible as part of the *res gestæ* (Hanover R. Co. v. Coyle, 55 Penn. St., 396, 402).

"In an action against a railroad company on account of injuries received by the plaintiff's wagon and horses from collision with the defendant's cars—Held, that statements made at the time by the servant who was driving the plaintiff's wagon, as to the cause of the accident, were a part of the *res gestæ*, and admissible in evidence against the plaintiff (Toledo, &c., R. R. Co. v. Goddard, 25 Ind., 185, 190).

DECLARATIONS MADE AFTER THE CASUALTY.

"Declarations of the servant or agent of defendant, made after the collision (although within an hour), describing the cause of the accident, are not competent against the principal (Fawcett v. Bigley, 59 Penn. St., 411).

"Where a peddler's wagon was struck and the peddler injured by a locomotive, the Supreme Court of Pennsylvania said: 'We cannot say that the declaration of the engineer was no part of the *res gestæ*. It was made at the time in view of the goods strewn along the road by the breaking up of the boxes, and seems to have grown directly out of and immediately after the happening of the fact.' The declaration was held to be 'a part of the transaction itself' (Hanover Railroad Co. v. Coyle, 55 Penn. St., 402; cited in Insurance Co. v. Mosely, 8 Wall., 397; approved in 9 Wall., 408).

"In an action against a railroad company on account of injuries received through a collision of its trains, evidence of statements (made subsequently to the accident) by a flagman as to how far he had gone back to flag the 'fast line' coming train, are hearsay and inadmissible (Penn. R. R. Co. v. Books, 57 Pa. St., 339, 343).

"In an action against a railway company for causing the death of an employé, declarations made by another employé immediately after (the precise time does not appear) the fatal occurrence, which he witnessed, as to its cause—Held, not admissible as a part of the *res gestæ* (Supm. Ct., 1876, Marsh v. South Carolina R. R. Co., 56 Georgia, 274).

"In an action against a railroad company for injuries occasioned by the negligence of the company's servants, the declaration of the driver of one of the cars immediately after the accident, and while endeavoring to account for it, to the effect that he could not stop the car on account of the brakes being out of order, is not admissible against the company. (Luby v. Hudson River R. R. Co., 17 N. Y., 131; Card v. N. Y. & Harlem R. R. Co., 50 Barb., 39.) But any expression of such driver in the heat of the occurrence, showing his then design to do an injury, and not being a declaration predicated upon an afterthought, is admissible (Whittaker v. Eighth Avenue Railroad Co., 5 Robt., 650). This judgment was, however, reversed in 51 N. Y., 295, because it did not affirmatively appear that the declarations were made at the time.

"The account of an accident given half an hour afterward by the engineer to his chief is not part of the *res gestæ*, and not admissible in favor of the company (Nashville, etc., R. R. Co. v. Messino, 1 Sneed, Tenn., 220, 227).

"In an action against a railroad corporation for damages sustained by the negligence of their engineer, his statements as to the accident, made a few days afterward, are inadmissible in evidence against the corporation (Robinson v. Fitchburg, etc., Railroad Co., 7 Gray, 92, 96).

"So also of statements of their President to the plaintiff, after the act complained of, that he thought the defendants would give him something or pay him something (Ib., p. 97). "A railroad agent to whom complaint was made for killing cows, offered to pay for the cattle killed, but the owner thought the offer too small and brought suit—Held, that the onus of disproving negligence was thereby put upon the railroad company (Georgia Railroad, etc., Co. v. Willis, 28 Ga., 317).

"Declarations by the conductor, baggage-master and station-master, the next morning after the trunk was lost, in an-

swer to inquiries in behalf of the plaintiff, are admissible against the corporation in action of tort for loss of the trunk. 'It was part of the duty of those agents to deliver the baggage of passengers and to account for the same if missing, provided inquiries were made for it within a reasonable time. The declarations were, therefore, made by them as agents of the defendants, within the scope of their agency and while it continued' (Morse v. Connecticut River Railroad Co., 6 Gray, Mass., 430). * * *

"The conversations of a captain of a steamer with a party injured in getting on his boat, made two days and a half after the accident occurred, in which he attributed the accident to the carelessness of the servants of the boat in putting out the plank, are not evidence to charge the owners of the boat with fault, and this though made while the boat was still on its voyage, and before the voyage upon which the injured party had entered was completed (Packet Co. v. Clough, 20 Wall., 528).

"A passenger in a steamboat, in an action against the owners for damages, having proved the injury to himself through the negligence of the master and crew, offered further evidence to show that, while sitting upon the wharf immediately after the injury, he applied to the master for some of his men to assist him into a carriage, who refused, saying he had enough for his men to do on board—Held, that such evidence was admissible, because such conduct of the master was part of the transaction in question, and because it was proper for the purpose of showing the damage sustained (Hall v. Steamboat Co., 13 Conn., 319, 324).

Partnership of Companies in Freight Lines.

In the case of Alex. H. Irving vs. the Nashville, Chattanooga & St. Louis Company the Supreme Court of Illinois decided:

1. When there is no joint expense, no joint property, no joint losses, no joint profits, and no arrangement to share loss and profit, there is no partnership. A communion of profit is of the very essence of the contract of partnership, for without this communion of profit a partnership cannot, in the contemplation of law, exist.

2. When there was an arrangement between different railroads whereby each road agreed to carry the cars of the other, having the name "Green Line" painted thereon over its own road without breakage of bulk, at such rates as might be agreed on, each company fixing its own rates of freight passing over its own road, and collecting the same as the freight passed over its road, and having no interest in freights not reaching its road; each road desirous of making a through rate over other roads, via those "Green Line" cars would ascertain the rates the intermediate road or roads charged, and, adding the same to its own rates, fix its own schedule of through rates, which is termed "Green Line rates," and there was no joint expense or loss or profit, except that where a loss could not be located on any particular road, a *pro rata* share of the loss was borne by all that carried the freight, it was held there was no partnership.

3. And when there was an arrangement like the foregoing the fact that the words "Green Line" were painted on the roof of a wharf boat, and were also printed at the top of the bills of lading, the name of the railroad company being also printed on the bill of lading, would not estop such railroad company from denying there was such a partnership.

Limiting Railroad Aid in Minnesota.

At the recent election in Minnesota the following amendment to the state constitution was ratified by a large majority:

"Article 9, Section 15.—The Legislature shall not authorize any county, township, city or other municipal corporation to issue bonds, or to become indebted in any manner, to aid in the construction or equipment of any railroad to any amount that shall exceed 5 per cent. of the value of taxable property within such county, township, city or other municipal corporation, the amount of such taxable property to be ascertained and determined by the last assessment of said property, made for the purpose of state and county taxation, previous to the incurring of such indebtedness."

Fast Time Under Difficulties.

One day last summer a car-load of tourists was, by mistake, left at Merced, Cal., on the Visalia Division of the Central Pacific, 57 miles south of Lathrop, and Engine No. 107 was sent down from Lathrop to bring them up. The engine is a light one, having 15 by 22 in. cylinders and 4½ ft. drivers; the road is generally level. On the way the engine lost 10 minutes in stopping for water; 10 minutes with a hot box, 15 minutes in turning the engine and waiting for orders, and 20 minutes in disconnecting one side of the engine, on account of the valve-stem becoming bent. With all these drawbacks and running the last 30 miles with one cylinder only, the round trip of 114 miles—57 light and 57 with one car—was made in 3 hours, 15 minutes, or 2 hours, 20 minutes actual running time, an average of 48.86 miles an hour.



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CONTENTS.

ILLUSTRATIONS:	Page.	GENERAL RAILROAD NEWS:	Page.
Standard Signal Posts, Pittsburgh, Cincinnati & St. Louis Railway.....	631	Personal.....	638
CONTRIBUTIONS:		Traffic and Earnings.....	638
Premiums to Road-Masters.....	631	Railroad Law.....	633
EDITORIALS:		The Scrap Heap.....	638
Bribery—A Lay Sermon for Thanksgiving Day.....	634	Old and New Roads.....	639
Railroad Earnings in October.....	635	Southern Railway & Steamship Association.....	631
Statistics of Life of Rolling Stock and Superstructure.....	635	Railroad Earnings in October.....	637
Foreign Railroad Notes.....	635	Locomotive Returns, August, 1879.....	642
Record of New Railroad Construction.....	636	ANNUAL REPORTS:	
EDITORIAL NOTES.....	636	Boston & Providence.....	642
NEW PUBLICATIONS.....	636	Valley, of Virginia.....	642
GENERAL RAILROAD NEWS:		MISCELLANEOUS:	
Meetings and Announcements.....	636	Signal Posts on the Pittsburgh, Cincinnati & St. Louis.....	631
Elections and Appointments.....	637	Life of Equipment and Superstructure of Illinois Railroads.....	633

EDITORIAL ANNOUNCEMENTS.

PASSED.—All persons connected with this paper are forbidden to ask for passes under any circumstances, and we will be thankful to have any act of the kind reported to this office.

ADDRESSES.—Business letters should be addressed and drafts made payable to THE RAILROAD GAZETTE. Communications for the attention of the Editors should be addressed EDITOR RAILROAD GAZETTE.

ADVERTISEMENTS.—We wish it distinctly understood that we will entertain no proposition to publish anything in this journal for pay, EXCEPT IN THE ADVERTISING COLUMNS. We give in our editorial columns OUR OWN opinions, and those only, and in our news columns present only such matter as we consider interesting and important to our readers. Those who wish to recommend their inventions, machinery, supplies, financial schemes, etc., to our readers can do so fully in our advertising columns, but it is useless to ask us to recommend them editorially, either for money or in consideration of advertising patronage.

CONTRIBUTIONS.—Subscribers and others will materially assist us in making our news accurate and complete if they will send us early information of events which take place under their observation, such as changes in railroad officers, organizations and changes of companies, the letting, progress and completion of contracts for new works or important improvements of old ones, experiments in the construction of roads and machinery and in their management, particulars as to the business of railroads, and suggestions as to its improvement. Discussions of subjects pertaining to ALL DEPARTMENTS of railroad business by men practically acquainted with them are especially desired. Officers will oblige us by forwarding early copies of notices of meetings, elections, appointments, and especially annual reports, some notice of all of which will be published.

BRIBERY—A LAY SERMON FOR THANKSGIVING DAY.

On the day set apart for the expression of our gratitude for the blessings which we enjoy, it is a common practice for preachers of religion to allow themselves some latitude in the selection of their subjects and the matter of their sermons; they then often "hold forth" on secular topics. This practice has suggested a reciprocal "exchange of pulpits," and, for the time, "transportation, engineering and railroad news" are surrendered to them, while we preach a short sermon, the subject of which is indicated by the above title.

It would not be a sermon, though, without a text, but inasmuch as the privilege of having one is usually denied to those who weekly elucidate temporal, civil and profane matters, we will make the fullest use of our temporary prerogative, and select not one, but a number, which are as follows:

First: "And it came to pass, when Samuel was old, that he made his sons judges over Israel. * * * And his sons walked not in his ways, but turned aside after lucre, and took bribes and perverted judgment."—1 Samuel, viii., 1, 3.

Second: "I am old and gray-headed * * * Behold here I am: witness against me before the Lord, * * * whom have I defrauded? whom have I oppressed? or of whose hand have I received any bribe to blind mine eyes therewith?"

Third: "Gather not my soul with sinners, nor my life with bloody men; in whose hands is mischief, and their right hand is full of bribes."—Psalms, xvi., 9, 10.

Fourth: "He that walketh righteously, and speaketh uprightly: he that despiseth the gain of oppressions, that shaketh his hands from holding bribes, that stoppeth his ears from hearing of blood, and shutteth his eyes from seeing evil: he shall dwell on high."—Isaiah, xxviii., 15, 16.

Fifth: "For I know your manifold transgressions and your mighty sins: they afflict the just, they take a bribe, and they turn aside the poor in the gate from their right."

These texts indicate very plainly what the writers quoted thought of bribery in those ancient times. If the ideas regarding it expressed in the vigorous English which has been quoted from our translated scriptures were read and reflected upon oftener now, it might have a wholesome influence in many directions where there is manifest moral obliquity and obtuse-

ness regarding this subject. In its discussion it will be seen that it naturally divides itself into two heads:

1. What is bribery?
2. Wherein does the evil of it consist?

With reference to the first point, even if our own knowledge and observation shed no light on it, the dictionaries would not leave us in doubt. Thus Webster defines "bribe" as "a price, reward, gift or favor bestowed or promised with a view to pervert the judgment or corrupt the conduct of a judge, witness, or other person. A bribe is a consideration given or promised to a person, to induce him to decide a cause, give testimony, or perform some act contrary to what he knows to be truth, justice, or rectitude." The refuge of the receivers of bribes, from Lord Bacon's time down to the present day, is that although they receive "gifts" they have not permitted the latter to influence their decisions. In the "confession and humble submission" of Bacon he admits receiving gratuities from various persons. Of one of these he says, in his quaint language, "the award was ended or depending." If we substitute piano for "cabinet" and put the report in modern language, the following admission, made more than 250 years ago, might represent cases which are now related in whispers about officials of the present day. Of this, Bacon wrote: "I confess and declare, that such a cabinet was brought to my house; and that I said to him that brought it, that I came to view it, and not to receive it; and gave commandment that it should be carried back, and was offended when I heard it was not. * * * And so it remains yet ready to be returned to whom your Lordships shall appoint."

The pitiable confession of this great man is made up of 28 similar cases, nearly all of which involved more or less guilt. That the practice of receiving presents was very common among the judges and other officials of that time was lamentably true, and probably the practice was popularly regarded with great lenity. Bacon himself says he "never had bribe or reward in his eye or thought, when he pronounced any sentence or order," and one of his biographers says that his decisions seem to have been thoroughly just; that in several cases he gave judgment against the party bestowing the bribe, and no attempt at a reversal of any of his numerous decrees appears to have been successful. When his case came before Parliament, however, none of these considerations were permitted to have any weight, and he was subjected to a fine and ransom of £40,000, to imprisonment in the Tower during the King's pleasure, to be forever incapable of any office, or to sit in Parliament or court. This decision, as his biographer expresses it, "had a great constitutional value; it inflicted upon an abuse, which had heretofore been tolerated, a punishment which made it thereafter infamous." Bacon himself said: "I was the justest judge that was in England these fifty years; but it was the justest censure in Parliament that was these two hundred years."

Like most preachers, however, we have wandered a little from the division of our subject; following the clerical practice we return to "firstly."

Although the dictionaries are very explicit about bribery, yet Bacon, who had been a receiver of bribes, and who for that reason had probably been led to make nice distinctions, classifies them under three heads:

"The first, of bargain and contract for reward to pervert justice pending the suit in action.

"Second, when the judge conceives the cause to be at an end, by the information of the party or otherwise, and useth not such diligence as he ought to inquire of it.

"Third, where the cause is really ended, and it is sine fraude, without relation to any precedent promise."

Of the first and grosser form of bribery not much need be said. A consideration paid and received with the stipulated and acknowledged purpose of perverting justice is in its effect the same as or worse than theft. That is, it is depriving a person or persons of that which justly belongs to them, for the purpose of securing the gift to the one who occupies the position of judge. The scriptures speak of such as "bloody men, who afflict the just," and who "turn aside the poor in the gate from their right." No language could be stronger than this, and no picture more vivid. Hap-

pily public sentiment is very strong in its condemnation of this form of iniquity. The point at which the general conscience begins to fail is when bribery assumes some more subtle form, when it is made to appear to persons that they can decide justly and still receive gifts, that their ideas get confused.

It should be made plain, too, that while the voice of almost the whole of the civilized world has united in condemnation of bribing in judges, it is much more lenient when officers high in authority, it may be, in the state or corporations are guilty of such corruption. The moral principles, however, which are involved are the same. The latter officers are appointed to the position they occupy to act as judges for the interests of the people they represent. If by taking money their judgment is perverted, they are doing simply what the judges do who deprive others of what is justly theirs in order to secure a proffered gift. Thus, let us take an officer of a railroad who is delegated to buy, say, rails. A manufacturer with an inferior article offers him a consideration to secure the order. Now, just to the extent to which they are inferior, he deprives his employers of value which he, in part, puts into his own pocket in the form of a gift or "commission." The same is true when the duty of the officer is only recommendatory in its character.

A master mechanic who recommends inferior locomotives and thus secures an order for a manufacturer who makes him a present cheats the company by whom he is employed, by the amount of the difference between the good locomotive and the poor one.

But we can imagine some men saying: "I take commissions for purchases I make, but I never allow such gifts to influence my judgment. I buy just as good spikes, oil, car-wheels, or whatever it may be, and at just as low prices as I would if I did not receive a commission, or bribe as you offensively call it; the only difference is that I am careful to give my orders to those who are willing to do the right thing by me." Now, the fact that so few persons are willing publicly to avow such opinions or admit such practices, and that the payment of bribes is almost universally kept in profound secrecy, is evidence enough that people who hold such opinions know that the public will not believe their arguments. The experience of mankind 250 years ago had shown that corruption of judgment followed the practice, and the English Parliament formulated that belief in its condemnation and disgrace of one of the most brilliant men in literature, science and law that has ever lived. It is useless for any one employed, with an implied understanding that he will preserve an impartial judgment which will enable him to act disinterestedly in the interest of his employer, to attempt to reopen the argument. As has already been stated, Bacon's trial and sentence established the moral law which governs this whole subject, and over the whole civilized world the acceptance of gifts from suitors by any person occupying a position of trust is regarded as evidence of corruption of judgment.

It is a little singular, too, that of all the faculties of the human mind, the one which is most often at fault, that is the cause precedent to most of the error and much of the suffering of mankind, the one which experience should cause us to distrust the most and guard the most carefully, that which is the last and highest development of civilization, which is the most delicate and subtle in its operation, and susceptible to influences which are beyond the range of mental analysis, that this faculty of human judgment is the one that, so far as the future is concerned, people trust to most implicitly, and that all of us regard it as more or less infallible. On the other hand, if there is one passion which will lead men to the verge of destruction, and over it, it is the love of lucre. A person, then, who occupies a position of trust, and accepts gifts from suitors, is placing this fierce lust for money, and the power and enjoyment which it gives, over against the most susceptible of all human faculties, one which a slight word, an unconsidered thought, a trivial act, or some inscrutable influence way down in human consciousness will influence or change in a way that is incomprehensible. Is it any wonder then that when in such cases we see a person voluntarily subjecting himself to the, in some sense, brutalizing influence of money, we instinctively believe that the coarse motive will be the influential one, and that the subtle and delicate discrimination, of what the scripture calls righteousness, will be blunted and deadened. The almost universal opinion of the world on the subject is based on sound reason and observation.

That the eyes of the mind and the heart "are blinded" by bribes was a fact observed in the days of the prophet Samuel. That the "judgment was perverted," some "defrauded," others "oppressed," the "just afflicted" and the "poor turned aside from their

right" is related as in the nature of cause and effect.

Of the evil influence of bribery on our national, state and municipal affairs and its effects upon railroads and railroad management, a volume might be written. Even in its most common form of paying and receiving some consideration for purchases made, or for special privileges, the effect is to put the most worthy and honorable dealers at a disadvantage and to give it to those who will use corrupt means to secure it. It tends to break down all public belief and trust in justice and fair dealing, and it often gives power and wealth to those who are the least scrupulous about the ways in which they get it. The effects of bribery, as has been pointed out before, are the same as those of theft, but in a more subtle form. A thief on the outside of a man's house is more easily guarded against than one who in the guise of a trusted servant takes what is yours and appropriates it to his own use.

The methods practiced on railroads by which bribes are sometimes paid, and the consciences of those who receive them are reconciled to the iniquity, are often extremely ingenious, and it sometimes requires not a little ethical discrimination to discern wherein the guilt of receiving gifts, if any, consists. That sooner or later there will be a quickening of the public conscience on this subject there can be no doubt, and the time is coming when the fact, if known, that a man occupying a position of trust has incurred the danger of "perversion of judgment" by accepting gifts and bribes, from those seeking their own advantage, will make him infamous as Lord Bacon was, no matter how high his position, how great his power or ability. To the eradication of the evil let all strive and follow Bacon's advice, who taught so eloquently and wisely, but whose practice, alas, was not always in consonance with his teaching.

"For corruption"—he wrote in one of his essays—"do not only bind thine own hands or thy servants' hands from taking, but bind the hands of suitors from offering. For integrity used doth the one; but integrity professed, and with a manifest detestation of bribery, doth the other."

Railroad Earnings in October.

October earnings are reported in our table by 38 railroads having in the aggregate 23,402 miles of road this year, or about 29 per cent. of the total mileage in the United States—the largest number of roads that we have ever had reports from, which is in itself evidence of unusual prosperity. These 38 roads, working 9.8 per cent. more mileage than in the corresponding month of year, have earned 21.1 per cent. more money, and their average earnings per mile of road have increased from \$741 to \$816, or 10 per cent., which, considering that October was a good month last year, is a very favorable showing. Moreover, of the entire number reporting only one road, the St. Paul & Sioux City, shows a decrease in total earnings, though there are three others—the Central Pacific, the International & Great Northern and the Philadelphia & Reading—that have smaller earnings per mile. Some of the increases in earnings per mile are very large, as 50 per cent. on the Atchison, Topeka & Santa Fe, 51¼ on the Cairo & St. Louis, 40½ on the Chicago, St. Paul & Minneapolis, 39½ on the Memphis, Paducah & Northern, 45 on the Minneapolis & St. Louis, 284 on the Mobile & Ohio, 88½ on the Northern Pacific, 44¼ on the Paducah & Elizabethtown, 26 on the St. Louis & San Francisco, 26¾ on the Toledo, Peoria & Warsaw, and 26¼ on the Wisconsin Valley. The Northwestern spring-wheat roads have increased their mileage so greatly that a comparison is not so significant as it would be otherwise. But all but one have increased their earnings per mile in spite of this increase of mileage. There are eight that report, with this year, 6,582 miles of road, against 5,27 last year, an increase of 14 per cent., and they earned \$3,101,397 last year and \$1,062,493 more (34.4 per cent.) this, and their average earnings per mile were \$551 last year and \$740 this—an increase of 25½ per cent.

Seven roads chiefly engaged in carrying produce to Chicago or Milwaukee have 6,834 miles of road this year, which is 18.8 per cent. more than they worked last year; they earned \$4,864,254 this year, which is 31 per cent. more than they earned last year, and their average earnings per mile increased from \$647 to \$712, or 10 per cent.

Five roads which carry produce to St. Louis with 1,559 miles of road this year (8 per cent. more than last) have earned \$1,107,270, and 29 per cent. more than in October of last year, their average earnings per mile having increased from \$596 to \$710—over 19 per cent.

The Eastern roads reporting as usual are very few, but the great system of the Pennsylvania, which carries to all the leading exporting cities, again appears,

with a considerable increase over 1878 and 1877 (which were about the same), and the Reading, as the representative of the anthracite roads, shows a gain in its total but a loss in its earnings per mile, which last are the smallest which the road has had in October for five years.

The earnings per mile of road for six years have been as follows for the roads named below:

	1874.	1875.	1876.	1877.	1878.	1879.
Atch. Top. & S. F.	\$263	\$370	\$401	\$463	\$514	\$703
Burl. C. R. & Nor.	355	330	303	405	326	378
Cairo & St. Louis.	204	209	105	150	237	
Central Pacific.	1,163	1,229	1,157	874	858	785
Chicago & Alton.	848	752	820	657	720	779
Chic. & East. Ill.	522			519	520	585
Chic. Mil. & St. P.	616	696	585	838	583	591
Chic. & N. W.	937	938	935	785	748	872
Cleve., Mt. V. & C.						
Del.			233	239	243	270
Hammond & St. Jo.	719	587	639	743	797	816
Ill. Cen. in Ill.	801	859	744	747	619	679
Ill. Cen. in Iowa.	518	523	452	508	368	425
Ind. Bloom. & W.						
West.	427	400	404	347	485	570
In. & Gt. North.	322	340	305	351	437	425
Louisville & Nash.						
Mem. & Nash.	594	505	557	502	468	536
Mo. Kan. & Tex.		172	148	150	82	115
Mobile & Ohio.	390	388	427	419	445	493
Nash. Chat. & St. L.	400	417	502	440	136	523
Pad. & Eliz.		457	421	404	393	487
Pennsylvania.				181	165	238
Phila. & Reading.		2,198	1,750	1,910	1,761	1,643
St. L. Al. & T. H.						
Main Line.	657	522			514	624
St. L. Al. & T. H.						
Bellefonte Line.	927	808	718	877	796	889
St. L. Iron Mt.						
& So.	522	567	639	746	853	1,041
St. L. & San Fran.			402	410	378	479
St. L. & S. E.	378	300	317	323	341	397
Scioto Valley.				134	290	303
Tol. P. & Warsaw.	396	337	582	486	441	559
Union Pacific.	1,100	1,221	1,284	1,138	1,219	1,481
Wabash.	757		700	687	752	848

In this table there are reports of 31 roads for 1878 and 1879, of 30 of them for 1877 also, of 26 for 1876, of 14 for 1875, and of 22 for 1874. The October earnings were larger in 1879 than in 1878 of 28 out of 31 roads; than in 1877, of 21 out of 30; than in 1876, of 17 out of 26; than in 1875, of 18 out of 24; than in 1874, of 16 out of 22—showing favorably this year with whatever other the comparison is made.

No less than 16 of the 31 roads show larger earnings this year than in any other for which figures are given in this table.

For the ten months ending with October our table has reports from 24 railroads with 22,019 miles of road this year—5.7 per cent. more than last year. With this increase of mileage the roads have earned \$10,483,802, or 7.8 per cent., more than last year, and their average earnings per mile of road have increased from \$5,960 to \$6,083, or 2.1 per cent.—not a considerable improvement. Eleven of the 34 roads show a decrease in total earnings, and 13 in earnings per mile of road. The large increases in the latter are 36¼ per cent. on the Atchison, Topeka & Santa Fe, 22 on the Chicago, St. Paul & Minneapolis, 19½ on the Chicago & Western Michigan and 17½ on the Mobile & Ohio—no other as much as 15 per cent. The largest decreases have been 16 per cent. on the Chicago, Milwaukee & St. Paul, 15½ on the Memphis, Paducah & Northern and 8½ on the Central Pacific—no other as much as 8 per cent.

Last year our table showed a very slight increase in average earnings per mile in 1878 over 1877, but there were only 27 roads in that table, instead of 34 as in this year's, and only 22 are the same, so we cannot be sure of the conclusion that would appear from the comparison—namely, that the railroads have done a very little better so far this year than in the corresponding periods of 1878 and 1877 alike.

Of the roads reporting for the ten months, three carry trunk-line traffic, and of these the Grand Trunk shows an increase of 0.1 per cent., the Great Western a decrease of 3.8 per cent., and the Pennsylvania an increase of 7.7 per cent.

The prospect is that most of the roads, and especially those which have a considerable share of through traffic between the West and the sea-board, will show considerable increases for the other two months of the year. November certainly has been a month of heavy traffic and remunerative rates.

Statistics of Life of Rolling Stock and Superstructure.

The life of rolling stock, rails, ties and bridges has been the subject of some investigations by the Illinois Railroad Commission, and the table giving the conclusions we publish elsewhere. It is impossible to tell how much these figures are worth until we know from what materials they were taken; and for rolling stock and rails life, in time, has very little significance; it is service performed during life that we need to know. How many miles have the engines and cars run, and how many gross ton-miles does the average rail bear? Moreover, when is a locomotive or car "worn out?" The method in which repairs are made and charged may make years of difference in this respect, enough to account for the average life of 24 years credited to locomotives on the Michigan Central, while on the Pittsburgh, Cincinnati & St. Louis it is but 12 years, both being roads on which the engines are likely to be kept busy.

The life of passenger cars is reported in this table to vary

from 8 years (on the Grand Tower & Carbondale) to 20 (on the Lake Shore and the Michigan Central, where service is most constant and speed greatest); of stock cars, from 7 to 14 years; of freight cars, from 5 to 18 years (least on the Grand Tower & Carbondale and most on the Lake Shore again). Iron rails are credited with lasting 12 years on the Grand Tower & Carbondale and 10 on six other roads, of which the St. Louis, Alton & Terre Haute has the heaviest traffic; on the Michigan Central and the Pittsburgh, Fort Wayne & Chicago they are reported to last but 3 years. The life of steel is reported for but three roads—at 9 years on the Michigan Central, 15 on the Chicago & Alton and 20 on St. Louis & Southeastern.

The life of cross-ties in years is much more valuable information. A part of the destruction of cross-ties is due to crushing, and so is dependent on the weight of traffic over them, and especially on the weight per wheel, but cross-ties are chiefly destroyed by decay, which is not dependent on traffic though affected largely by drainage, and likely to be especially large on unballasted railroads, of which there are a great many in Illinois. The table shows an average life for oak ties varying from 4 years on the Vandalia Line to 8 years on eight other roads; of pine ties (used on only four roads) varying from 3 to 6 years; of hemlock ties (used on eleven roads) from 3 to 6 years, and of cedar ties (used on four roads) from 4 to 6 years. The table assumes to give the average life of everything for the whole railroad system of the state, but it does this not by dividing the aggregate years of life by the number of individuals, but by averaging the averages—a perfectly absurd process, which we have seen applied to some other returns in the earlier reports of this Commission. Thus if the average life of ties in a road 10 miles long with the usual number of 2,640 per mile was found to be 10 years, and on a road 1,000 miles long was 5 years, by the method of this table the average of the two roads taken together would be 7½ years. But if the two roads should be consolidated and the estimates of provisions for renewals should be made from these statistics, the error would be very soon manifest. By them the supply for a year would be found by dividing the whole number of ties in the 1,010 miles of track (2,686,400) by the average life of 7½ years, which would be 355,520, while actually 2,640 would be required for the short road and 528,000 for the long one, 590,040 in all, which shows an average live on the two roads of 5.025 years, instead of 7.5. Now the only value that statistics of this kind have is for purposes of this kind—to estimate aggregate consumption, the demand for supplies, the average cost of maintenance, etc., and so the averaging of averages is utterly misleading; it is the averaging of aggregates that is required.

The life of bridges reported in the table is for truss bridges from 6 years on the Cairo & St. Louis and the Grand Tower & Carbondale to 20 on the Indianapolis & St. Louis; for trestle bridges, from 6 years on the Grand Tower & Carbondale to 10 the Michigan Central and the Wabash. Chester & Western; for pile bridges, from 4 on the Grand Tower & Carbondale to 12 on the Michigan Central. Averages are also given for joint fastenings, telegraph poles and fences—the latter from 6 to 10 years.

As we have intimated before, the value of such a table depends entirely upon the materials from which it is made. If it is based on answers to a circular asking simply for the "average duration" of the several items on each road, then substantially it is good for nothing—for it is chiefly an assemblage of guesses. To get the average life of ties we should require a statement of the total number in track, and the total used for renewals and for new construction separately for a long series of years. And a similar method is required to ascertain the life of rails in years, which is hardly worth knowing when we have got it, unless we have the tonnage, or at least the "trainage" (which is very much better than nothing, though of course not an accurate measure of wear) over them.

Foreign Railroad Notes.

All the Danube countries which had their political relations changed by the Russo-Turkish war are to have new railroads—in some cases the first they have ever had. Servia proposes to build its road through the government; but it is reported that the great Russian railroad contractor, Poliakov, has made an offer to provide the money, construct and work all the Serbian lines without asking for any government guarantee. Poliakov has also undertaken to build some lines in Bulgaria, in which the Turks had already a few railroads. Austria provides for the Bosnian roads, but it is not yet quite determined what its system will be. All this country is wonderfully endowed with natural resources—ores, magnificent timber, and great expanses of fertile soil, with a favorable climate—which are generally very imperfectly utilized now, if at all. But the countries are pretty well peopled, nevertheless.

William von Nördling, General Director of Railroads of the Austrian government, has offered his resignation, "on account of a difference of opinion with the Minister of Public Works concerning the location of the Arlberg Railroad," it is said. Nördling is a distinguished engineer, a considerable part of whose experience was in France, we believe. As to his capacity in questions of administration, etc., there has been more difference of opinion than as to his engineering ability. It is not intended to fill his place, which seems to have been equivalent to that of a general consulting railroad engineer for the government, which in a country which prescribes so many things to the railroad companies is a place of great importance. Until recently the Austrian government had not had any railroads of its own for many years.

The Deutsche Zeitung in celebration of the "railroad jubili-

lee" on the 6th of November gave the following statistics, which we recommend our readers to take with several grains of allowance, though they not probably in most particulars not very far from correct: "The globe is now occupied by 200,000 miles of railroad; 120,000 passenger cars, and 1,500,000 freight cars pass back and forth over its surface, drawn by 70,000 locomotives, and 4,000,000 people intrust themselves daily to the power of steam. The freight traffic amounts to 2,000,000 tons daily, and the sixth part of the traffic of the world, which in 1874 had a value of more than \$12,500,000, goes to the credit of railroad earnings. The construction of all these roads has required the sum of \$20,000,000,000, of which three-fifths is the share of Europe. It has been estimated that from 1865 to 1875 railroad construction in Austria gave their daily bread, directly or indirectly, to 260,000 workmen—including their families to some 624,000 persons. The number of Austrian railroad officials has reached 15,000 at this time, and the number of those included under the name of 'servants,' such as engine-men and firemen, conductors, car-masters and their assistants, road supervisors and road guards, etc., exceed them several times. They form a standing army such as no power on earth can exhibit."

Record of New Railroad Construction.

This number of the *Railroad Gazette* contains information of the laying of track on new railroads as follows:

New York City & Northern.—Completed by laying track from Yonkers, N. Y., northward to a point near Lake Mahopac, 33 miles.

Sandy River.—Extended northwest to Phillips, Me., 3 miles. Gauge, 2 feet.

Terre Haute & Southeastern.—Extended from Markland, Ind., southeast to Worthington, 14 miles.

Chicago, Milwaukee & St. Paul.—The track of the *Hastings & Dakota Division* is extended from Appleton, Minn., west to Ortonville, 30 miles. A branch of the same division is also completed from Vermillion, Minn., to Bridgeport, 1 mile.

Burlington, Cedar Rapids & Northern.—The track of the *Muscatine Division* is extended from Wellman, Ia., westward to Thornburg, 22 miles.

Central Branch, Union Pacific.—Extended from Gaylord, Kan., westward to Kirwin, 15 miles.

This is a total of 108 miles of new railroad, making 3,150 miles thus far this year, against 1,947 miles reported for the corresponding period in 1878, 1,945 in 1877, 2,102 in 1876, 1,150 in 1875, 1,686 in 1874, 3,355 in 1873, and 6,311 in 1872.

A NEW YORK CENTRAL-WABASH COMBINATION is indicated by the report which we copy from the *New York Evening Post* of the sale of \$25,000,000 of New York Central stock to a London syndicate, and the admission of a representative of that syndicate and two of the Wabash directors into the New York Central board. The statement is positive that the sale has been made, but nothing definite is stated as to the conditions under which it was made, but it is assumed that one of them is that the Wabash system shall become an ally of the Vanderbilt roads; and as the reported price is for ten dollars per share below the current market price, amounting to \$2,500,000 on the whole transaction, it is evident that there must have been some consideration. But how the purchase of stock by any man or set of men can make it more for the interest of the Wabash to favor the Vanderbilt roads, or can compel it to do so, we confess we are unable to understand. What would be intelligible would be the establishment of a trust, in which New York Central and Wabash securities should be placed, the aggregate dividends being divided in certain proportions determined beforehand. That would make it for the interest of those having stock in the trust that the aggregate profits of the two companies should be as large as possible, and might make them positively indifferent whether a dollar should be the profit of the New York Central or the Wabash, since they would get the same proportion of it in either event. Moreover, by a trust stability of ownership and control could be secured, and hitherto the Wabash has not been held in hands that were likely to hold their control however prices might fluctuate.

There has been so far, however, no report of any trust or of any other arrangement securing the alliance of the two companies, or indeed of any sufficient justification of the sale of stock for \$2,500,000 less than the market price. In fact, evidently, something less than half of the story has been told, and all that makes it important—and it may be one of the most important steps in railroad policy ever taken—is as much a secret as ever. If, as is assumed, it is somehow provided that there shall be a more or less close combination between the Wabash and the Vanderbilt roads, it makes it certain that the Erie will never become the sole or chief connection of the great Wabash system. It makes it next to certain, also, that the Wabash will cease to be a disturbing element, and that it will be as eager as any to maintain rates everywhere—as, after its acquisition of so many connections west of the Mississippi, it was likely to be in any event. It is true that a different policy is imaginable, but it is not at all probable, especially with so large an English interest in these roads, which will be utterly indifferent as to the interests of particular localities, and always be opposed to railroad wars not strictly defensive. But until more is known of the transaction, it is hardly worth while to speculate about it.

THE SEASON OF NAVIGATION is very near its close. Insurance on hulls will not be taken on lake vessels after Sunday, and there have been few shipments this week except by propellers, and rates have been so confused by contracts to carry and hold in Buffalo harbor—including transportation and storage—that it is not easy to say what the rates have been. They have been low, however. Shipments of corn from Chicago to be held in Buffalo have been quoted at 5½ to 5¾ cents per bushel, and a cargo taken to be discharged was reported about the close of last week at 4½. Tuesday the rate telegraphed was 6 cents, but whether to hold or not was not specified. The shipments cannot amount to much in any event.

Very little grain has been shipped by canal to New York for a week past. A little corn was taken Saturday at 9½ cents, and as late as Tuesday two boat-loads of wheat are reported at 10½. There is no certainty of the boats getting through, and indeed when the weather was cold a few days ago, it was feared that the large amount afloat on the canal would be frozen up for the winter. Milder weather since makes it probable that everything will get through except, perhaps, the few boats which left Buffalo very recently.

Ocean rates have been quite steady and low, grain being quoted at 6¼d. per bushel from New York to Liverpool by steam nearly all the week. The lowness of freight appears chiefly in other commodities—35s. per ton for butter and cheese, 26s. 3d. to 30s. per ton for provisions, 45s. per ton for leather, 3s. 6d. per barrel for apples, and, by sail, 3s. 7½d. to 3s. 9d. per barrel for petroleum. The rate on cotton from New Orleans is reported Tuesday as just one-half higher than the rate from New York.

Hereafter, until spring, the movement of Western produce to the sea-board will depend wholly upon the railroads and the Mississippi River. The railroad rates being higher than have been maintained through several winters previous, and the produce seeking export in the West being exceptionally great in quantity, the opportunity is the best that has ever existed to demonstrate the efficiency of the Mississippi River as a route for exports. If it cannot command a traffic under these circumstances, it is hard to see how it ever can. Of course if it should divert any considerable traffic from the Eastern cities, it would compel the reduction of rail rates to the sea-board; but a reduction made by reason of river competition would be just as good proof of the effectiveness of the river route as the diversion of a large proportion of the grain exports to that route.

EXAMINATIONS FOR COLOR-BLINDNESS are being held on several railroads of Massachusetts at the instance of the Railroad Commissioners, who were instructed by the Legislature to inquire into the subject and report as to the necessity of legislation concerning it. The Commissioners, however, were given no authority to order examinations or money to pay for experiments, and all they have done or been able to do is to ask the railroad companies to institute some inquiries. One of these employed Dr. Jeffries, well-known as an expert in color-blindness and by his book on the subject; but several examinations have not been conducted by any expert, or even by a physician. It is doubtless extremely desirable that those who have the authority to employ train-men should also be able to examine them for color-blindness; but the knowledge which enables one to do this does not come by nature, by any means, and there is a good deal of it—a special knowledge which probably at this time not half-a-dozen men in this country possess, for it is about as scarce among physicians as among other people. Only, a physician, and especially one whose specialty is eye diseases, can most easily acquire this knowledge, and requires less time than a layman to acquire the skill necessary to apply the tests. A test with lanterns can never be sufficient in any man's hands. It is just because the color-blind is usually able to distinguish what is to him the light gray of the green from the darker gray of the red, that there is any danger. If he never could distinguish them, he could not serve a day without making known his defect, and he would be conscious of it from childhood, and probably never would think of entering a service where the exercise of the color sense is required. But safety requires that green should always appear different from red to the train-man, however bright or dull they may be respectively, and however their luminosity may be affected by fog, a smoky glass, a reflected light, etc., which to the color-blind may make the green lamp look precisely like the red one, though ordinarily he can distinguish them.

THE ATLANTIC & GREAT WESTERN PLAN OF REORGANIZATION has been somewhat modified. The re-organization trustees had provided for issuing a first lien of \$8,000,000 to cover the expenses of reorganization, the renewal of the Ohio mortgage, the provision of equipment and the necessary improvements. Arrangements were made by which Bischoffsheim & Goldschmidt were to take one-third of this issue, one third was to be placed in England, and the other third was offered to the representatives of the Dutch interest (owning the Ohio mortgage bonds). The latter's agents in this country reported that \$8,000,000 would not be sufficient to put the property into sound condition, but that \$10,000,000 would be, and would be a safer loan than the smaller one. Thereupon it was necessary to make the arrangements over again, and it now seems probable that they have been completed. Whether they are or not, the road will doubtless be sold at foreclosure sale next January. The earnings recently have increased enormously, and the profits probably still more, as its traffic is largely through, which until September this year probably did not pay the actual expense of the road. This increase is in spite of an almost total loss of the formerly heavy petroleum traffic,

through the transfer of the centre of production to the Bradford region.

THE NEW YORK, LAKE ERIE & WESTERN ELECTION resulted in no revolution in the management, such as certain speculators have been prophesying. President Jewett himself voted 643,592 of the total number of 698,921 votes cast at the election. Of the 17 directors, 14 are re-elected, and the other three are Thomas Dickson, President of the Delaware & Hudson Canal Company, who has only been out of the board a year; Harrison Durkee, a wholesale grocer of New York, and a director of the Western Union Telegraph Company, and Mr. Wm. L. Strong, a New York dry-goods merchant. The last two are considered to have interests in common with Mr. Vanderbilt. These three succeed Samuel Sloan, George F. Talman and William Walter Phelps. The result of the operations of the past year has not been much better than the previous year's, so far as profit is concerned, but the freight traffic carried has been immensely greater, and substantially without increase in expenses, showing very greatly reduced cost per unit of traffic as the result of improvements already introduced. For the past two months the profits of the road have probably been much the largest it has ever had, but these will not appear in the returns for the last fiscal year.

NEW PUBLICATIONS.

Railroad men who read German may be interested in examining *Das Eisenbahn-Bauwesen für Bahnmeister und Bauaufseher* (Railroad Construction for Road-Masters and Foremen of Construction), a little manual of 240 pages and several plates, prepared by Mr. A. J. Susenmihl, an engineer ("Master of Construction") on a Mecklenburg road, a second revised edition of which has just appeared. It is intended for men who have had no technical education, but instead of avoiding technical descriptions, which would be unintelligible without some scientific knowledge, it begins by providing the requisite instruction. Nearly one-half of the book is given to chapters on arithmetic, mensuration, stereotomy, natural science, mechanics and surveying, after which come chapters on materials for construction, construction in general, and then railroad construction, including earth-work, superstructure, tracks and station yards and other appliances, such as crossings, signal stands, drainage work, etc. The use of logarithms and trigonometry is everywhere avoided.

From the same publisher, J. F. Bergmann, of Wiesbaden, we receive the "*Kalender für Eisenbahn-Techniker*" (Railroad Engineers' Almanac) for 1880, which is prepared by Mr. E. Heusinger von Waldegg, who has made immense and extremely valuable contributions to the technical railroad literature of Germany. This treatise contains a great amount of information, such as that contained in Hamilton's "Useful Information for Railway Men;" for instance, tables of weights and measures, of weights for different shapes and sizes of irons, chains, wire ropes and pipes; data for foundation and supporting walls, bridges, earth-works, foundations, machine construction, surveying, railroad superstructure and its maintenance, locomotive and car construction; notes on train resistance, speed of trains, the warming of cars, the lighting of stations, the expenses of operation, etc.; besides the almanac proper and the blank leaves for a journal. To many manufacturers, etc., in this country, the supplement to the "*Kalender*," which is not bound up with it, may be valuable for the list which it contains of all the technical officers—officers of the road, rolling stock and operating departments—of all the railroads in the German Railroad Union, and of the locomotive and car and car-wheel works of Germany, Austria and Switzerland. Foreign booksellers will supply the book on about six weeks' notice.

General Railroad News.

MEETINGS AND ANNOUNCEMENTS.

Meetings.

Meetings will be held as follows:
Texas & Pacific, special meeting, at the office, No. 275 South Fourth street, Philadelphia, Dec. 9, at noon.
New York & New England, annual meeting, at the office, No. 234 Federal street, Boston, Dec. 2, at 11 a. m.

Dividends.

Dividends have been declared as follows:
Chicago, Burlington & Quincy, 2 per cent., quarterly, payable Dec. 15. The company changes from half-yearly to quarterly dividends, but does not change the rate.
Northern (New Hampshire), 2½ per cent., semi-annual, payable Dec. 1.

Foreclosure Sales.

The *Lewisburg, Centre & Spruce Creek* road is to be sold under foreclosure of mortgage in Philadelphia, Dec. 13. The road is completed from Montandon, Pa., to Spring Mills, 43½ miles, and is intended to run through to Tyrone. It has always been worked by the Pennsylvania Railroad Company, and that company holds all the bonds, and will probably buy the road, merely changing the form of its ownership.

Southwestern Railway Association.

A special meeting of this Association was held in Chicago, Nov. 18, to consider how to treat certain business originating on the St. Joseph & Western road, for which no provision had been made. Members not being prepared to act without further information, no action was taken, and the meeting adjourned subject to call from General Commissioner Midgley.

A dispatch from Chicago, Nov. 24, says: "At a meeting of general passenger agents this morning, called by the Hannibal & St. Joseph road to investigate charges against the Chicago & Alton railroad, representatives of all the southwestern roads were present. None of the witnesses which the Chicago & Alton requested the Hannibal & St. Joseph to produce were present. In the afternoon Mr. Morse, General Passenger Agent of the latter road, withdrew the charges, a step against which the Chicago & Alton protested,

RAILROAD EARNINGS IN OCTOBER.

NAME OF ROAD.	MILEAGE.					EARNINGS.					EARNINGS PER MILE.	
	1879.	1878.	Inc.	Dec.	Per c.	1879.	1878.	Increase.	Decrease.	Per c.	1879.	1878.
Atchison, Topeka & Santa Fe.	995	869	126		14.5	\$759,000	\$446,528	\$312,472		70.0	\$763	\$514
Burlington, Cedar Rapids & North.	454	434	20		4.6	171,524	141,619	29,905		21.1	378	336
Cairo & St. Louis.	146	146				34,563	22,771	11,792		51.7	237	156
Central Pacific.	2,335	2,067	268		13.0	1,833,000	1,773,080	59,911		3.4	785	858
Chesapeake & Ohio.	435	435				183,325	170,552	12,773		7.5	421	406
Chicago & Alton.	840	840				654,280	487,921	166,359		34.3	779	580
Chicago & Eastern Illinois.	159	159				92,975	82,606	10,369		12.6	585	520
Chicago, Milwaukee & St. Paul.	2,182	1,414	768		54.3	1,290,000	823,722	466,278		56.6	591	583
Chicago & Northwestern.	2,219	2,103	116		5.5	1,935,000	1,573,422	361,578		23.0	872	748
Chicago, St. Paul & Minn.	178	178				139,917	99,472	40,445		40.6	788	550
Cleveland & Western Michigan.	246	246				44,827	36,861	7,966		21.6	182	150
Cleveland, Mt. Vernon & Del.	157	157				42,449	38,101	4,348		11.2	270	243
Hannibal & St. Joseph.	292	292				238,411	232,720	5,691		2.4	816	797
Illinois Central, Illinois lines.	854	818	36		4.4	580,244	506,751	73,493		14.5	679	619
" Iowa lines.	402	402				170,832	148,080	22,752		15.4	425	368
Indiana, Bloom. & Western.	212	212				120,785	102,860	17,925		17.4	570	485
International & Great Northern.	526	516	10		1.9	223,526	220,488	3,038		1.4	425	427
Louisville & Nashville.	1,118	973	145		14.9	600,000	455,619	144,381		31.7	536	408
Memphis, Paducah & Northern.	115	115				13,221	9,460	3,761		39.5	115	82
Minneapolis & St. Louis.	123	123				50,054	34,525	15,529		45.0	407	281
Missouri, Kansas & Texas.	786	786				387,701	349,890	37,811		10.8	493	445
Mobile & Ohio.	506	527			21	264,400	271,701	7,301		268.8	523	136
Nashville, Chattanooga & St. L.	349	349				169,638	137,104	32,534		24.0	487	363
Northern Pacific.	944	944				287,000	182,200	104,800		58.6	446	236
Paducah & Elizabethtown.	185	185				44,100	30,552	13,548		44.3	238	165
Pennsylvania.	1,765	1,716	49		2.9	3,518,144	3,215,410	302,734		9.4	1,988	1,874
Philadelphia & Reading.	939	890	49		17.4	1,542,911	1,408,674	134,237		9.5	1,643	1,761
St. L., Alt. & T. H. Main Line.	195	195				121,744	100,235	21,509		21.5	624	514
St. L., Alt. & T. H. Bellevue L'e	71	71				63,127	50,548	12,579		11.6	880	796
St. Louis, Iron Mt. & Southern.	685	685				713,200	583,983	129,217		22.1	1,041	853
St. Louis & San Francisco.	449	449				213,712	123,508	90,204		72.5	476	378
St. Louis & Southeastern.	208	208				82,008	71,001	11,007		16.4	397	341
St. Paul & Sioux City.	380	329	51		15.5	119,506	128,351	8,845		6.8	315	603
Scioto Valley.	100	100				30,250	28,983	1,267		4.4	303	290
Toledo, Peoria & Warsaw.	237	237				132,372	104,500	27,872		26.7	559	441
Union Pacific.	1,042	1,042				1,543,580	1,269,870	273,710		21.6	1,481	1,219
Wabash.	783	688	95		13.8	663,923	517,613	146,310		28.3	848	752
Wisconsin Valley.	90	90				27,228	21,491	5,737		26.7	303	239
Total, 38 roads.	23,402	21,317	2,100		9.8	\$10,103,523	\$15,785,350	\$3,326,958		\$8,785	\$816	\$741
Total increase.			2,085					3,318,173		21.1		

RAILROAD EARNINGS, TEN MONTHS ENDING OCTOBER 31.

NAME OF ROAD.	MILEAGE.					EARNINGS.					EARNINGS PER MILE.	
	1879.	1878.	Inc.	Dec.	P. c.	1879.	1878.	Increase.	Decrease.	P. c.	1879.	1878.
Atch., Top. & S. F.	935	798	137		17.2	\$5,088,040	\$3,171,348	\$1,916,692		60.4	\$5,442	\$3,974
Bur., Ced. Rap. & No.	436	434	2		0.5	1,210,960	1,273,497	62,537		4.9	2,778	2,934
Cairo & St. Louis.	146	146				219,443	192,740	26,703		13.9	1,503	1,393
Central Pacific.	2,233	2,067	166		8.0	14,426,638	14,637,049	210,411		1.4	6,461	7,081
Chesapeake & Ohio.	435	435				1,690,303	1,617,223	73,080		4.5	3,890	3,718
Chicago & Alton.	771	778	7		0.9	4,587,684	3,931,193	656,491		16.7	5,950	5,798
Chi. & Eastern Illinois.	159	159				704,957	672,460	32,497		4.8	4,434	4,239
Chi., Mil. & St. Paul.	1,905	1,414	491		34.7	7,847,000	6,926,038	920,962		13.3	4,119	4,898
Chi. & N. W.	2,163	2,083	80		3.8	13,252,929	12,511,690	741,239		5.9	6,127	6,007
Chi., St. Paul & Minn.	178	178				913,094	748,028	165,066		22.1	5,130	4,202
Chi. & West. Mich.	246	246				496,504	415,327	81,177		19.5	2,018	1,688
Cleve., Mt. V. & Del.	157	157				330,330	313,884	16,446		5.2	2,104	1,960
Grand Trunk.	1,358	1,390	32		2.3	7,420,425	7,409,495	10,930		0.1	5,494	5,531
Hannibal & St. Jo.	292	292				3,675,065	3,821,654	146,589		3.8	6,988	7,206
Ill. Cen., Ill. lines.	854	818	36		4.4	1,538,089	1,658,965	120,876		7.3	5,267	5,080
Ill. Cen., Iowa lines.	402	402				4,550,501	4,604,195	53,694		1.0	5,339	5,629
Inter. & Gt. Northern.	518	516	2		0.4	1,199,246	1,292,476	93,230		7.2	2,983	3,215
Louisville & Nash.	1,017	969	48		5.0	4,618,964	4,257,887	361,077		11.8	5,254	4,696
Mem., Paducah & No.	115	115				125,725	148,679	22,954		8.5	4,542	4,394
Missouri, Kan. & Tex.	786	786				1,257,200	1,250,000	7,200		15.4	1,003	1,293
Mobile & Ohio.	513	527	14		2.7	1,468,863	1,309,693	159,170		11.1	2,278	2,118
Nash., Ch. & St. Louis.	349	349				1,440,979	1,325,136	115,843		8.7	4,126	3,797
Pad. & Etown.	185	185				258,148	267,153	9,005		3.4	1,395	1,444
Pennsylvania.	1,739	1,716	23		1.3	28,034,359	26,035,337	1,999,022		7.7	16,121	15,172
Phila. & Reading.	877	800	77		9.6	12,377,304	10,249,094	2,128,210		20.8	14,113	12,811
St. L., A. & T. H. B. Line	71	71				444,282	406,435	37,847		9.3	6,258	5,724
St. L., Iron Mt. & So.	685	685				3,908,853	3,510,715	398,138		13.0	5,794	5,125
St. Louis & San Fran.	378	328	50		15.2	1,241,086	987,311	253,775		25.7	3,283	3,016
St. Louis & Southwestern.	208	208				603,840	539,201	64,639		12.0	2,983	2,593
St. Paul & Sioux City.	338	329	9		2.7	908,355	892,770	15,585		1.7	2,687	2,714
Scioto Valley.	100	100				261,192	232,707	28,485		12.2	2,612	2,327
Toledo, Peoria & War	237	237				1,025,138	1,065,770	40,632		3.8	4,325	4,497
Wabash.	707	688	19		2.8	4,171,220	4,210,818	39,598		0.9	5,900	6,120
Total, 34 roads.	22,019	20,832	1,187		5.7	133,942,345	124,250,019	9,692,326		7.8	\$6,083	\$5,900
Total increase.			1,187					9,692,326				

Mr. Charlton intimating a belief that there had been conspiracy to manufacture evidence against the Chicago & Alton by some one in the interest of the Hannibal & St. Joseph. He also offered to prove the conspiracy out of the mouths of the witnesses of the Hannibal & St. Joseph. He disclaimed, however, any imputation upon Mr. Morse, who was not in his present position when the charges were worked up. By a vote of the meeting the charges were withdrawn. Mr. Charlton then entered charges that the Hannibal & St. Joseph has sold second-class unlimited tickets to New York in violation of the agreement. The meeting sustained the charge and found the Hannibal & St. Joseph guilty, and inflicted the prescribed penalties. This meeting has been looked forward to with much interest in all railroad circles, and the result was a surprise.

Railroad Quarantine Conference.

The Conference called by General Manager Clark, of the Chicago, St. Louis & New Orleans road, to consider the question of railroad quarantine regulations, met in Nashville, Tenn., Nov. 19, during the meeting of the American Public Health Association. Mr. Clark was called to the chair, and Rudolph Fink, General Manager of the Memphis & Little Rock Railroad, made Secretary.

The following railroad men were present: Fred. de Funiak, General Manager, and D. W. C. Rowland, General Superintendent, of the Louisville & Nashville; Col. G. Jordan, Vice-President and General Manager of the Houston & Texas Central; Col. H. M. Hoxie, General Superintendent of the International & Great Northern and Galveston, Houston & Henderson; G. F. Raworth, General Superintendent of the Vicksburg & Meridian; J. W. Thomas, General Superintendent, and W. L. Danley, General Passenger and Ticket Agent of the Nashville, Chattanooga & St. Louis; Gen. Neeley and Major Fontress, directors for the Chicago, St. Louis & New Orleans.

The following sanitarians were present: Vice-President, John S. Billings, of the National Board of Health; Dr. J. D. Plunket, President of the State Board of Health; Wort Johnson, Secretary of the State Board of Health of Mississippi; John H. Rauch, President of the Illinois State Board of Health; Pinckney Thompson, President of the Kentucky State Board of Health; Dr. S. M. Bemis and Dr. R. W. Mitchell, of the National Board of Health; Dr. Robert Rutherford, of the Texas Board of Health, and

Dr. E. M. Wight, of the State Board of Health. Hon. Joseph H. Acklin, of Louisiana, was also present.

Two sessions were held, at which the questions relating to railroad quarantines were fully and ably discussed. The following resolutions, submitted by a committee, were finally passed:

"Whereas, The great benefits realized by the action of the National and State Boards of Health during the present year made it manifest that with the increasing experience of sanitarians in measures calculated to prevent the generation and spread of infectious and contagious diseases, and in the educated public opinion which is beginning to realize that the surest protection is in encouraging and sustaining such boards, we have reason to hope that the day is not far distant when such a system of sanitation and quarantine will be perfected and enforced as shall prevent entirely the introduction or spread of such diseases, without material injury to the business interests of the country; and

"Whereas, As shown by the experience of the past two years, the chief troubles to common carriers are the great number of local quarantines and the want of harmony and uniformity in their several regulations; therefore, be it

"Resolved, That a committee be appointed, to consist of one representative from each state Board of Health and one from each common carrier company in this convention, whose duty shall be, by petition or memorial, to bring to the legislatures of the states the practical defects of the present system of quarantine, in order that a more effective system may be adopted and enforced by appropriate legislation, and to ask through the various state legislatures an appropriation from Congress for the enforcement of state quarantines, to be expended under the approval of the National Board of Health."

The Chairman was requested to give general notice of the action taken, and was authorized to call the conference together again at such time as he might deem it necessary.

ELECTIONS AND APPOINTMENTS.

Baltimore & Chicago.—Mr. D. D. Miller, of Wooster, O., is President of the Ohio company of this name.

Connecticut Railroad Commission.—Gen. Francis A. Walker, appointed Railroad Commissioner of Connecticut last spring, has not yet been acted with the board, and it is

understood that he will not be able to do so, his duties as Superintendent of the Census requiring his whole time. No action as to appointing a successor will be taken until the Legislature meets.

Connecticut Western.—At the annual meeting in Hartford, Conn., last week, the following directors were chosen: Caleb J. Camp, W. L. Gilbert, George Dudley, Joseph Toy, A. H. Holley, C. T. Hillyer, T. M. Allyn, L. B. Merriam, L. W. Cutler, N. B. Stevens, E. T. Butler, D. J. Warner, E. K. Hunt.

Decatur, Mattoon & Southern.—At a recent meeting C. R. Cummings, E. Richards and J. B. Cohrs were chosen directors to fill vacancies made by resignation. The board then elected C. R. Cummings, President; G. R. Cobeigh, Manager. The new officers are also officers of the Pekin, Lincoln & Decatur Company, which has bought the road.

Hannibal & St. Joseph.—The following circular is dated Nov. 15: "Mr. T. Penfield having resigned the office of General Passenger and Ticket Agent, Mr. F. E. Morse has been appointed in his place, and will assume the position on the first day of December. Communications for this department will be addressed to him at Hannibal, Mo., from and after the above date."

Indianapolis, Cincinnati & LaFayette.—The following circular is dated Nov. 5:

"Mr. B. Lyman is appointed General Western Passenger Agent of the Indianapolis, Cincinnati & LaFayette Railroad, with headquarters at LaFayette. His duties will be to look after eastern business out of LaFayette, and western business out of Indianapolis; and will report to John Egan, General Ticket Agent, at Cincinnati."

"Mr. J. M. Johnson is appointed Assistant General Freight Agent of the Indianapolis, Cincinnati & LaFayette Railroad, with headquarters at LaFayette, and in charge of the local business between Indianapolis and LaFayette. He will report to H. J. Page, General Freight Agent."

International & Great Northern.—Mr. J. H. Page having resigned as General Passenger Agent, that office is merged with the General Freight Department, and Mr. Allen McCoy is appointed General Freight and Passenger Agent. Appointment to take effect Nov. 15, 1879.

Kansas Pacific.—Mr. Thomas L. Kimball is appointed General Passenger Agent, in place of Mr. Peter B. Groat, who is made General European Agent of this company and the Union Pacific. Mr. Kimball is also General Passenger Agent of the Union Pacific.

Mr. D. E. Cornell is appointed Assistant General Passenger Agent, and will have immediate charge of the passenger business, under Mr. Kimball's supervision.

Keystone.—The officers of this new company are: President, Edward L. Bodin; Directors, Robert B. Esler, Wm. M. Esler, Samuel P. Hutchinson, Benj. E. Davis, Lynn C. Troutman, Robert H. Tout, Chas. E. Henry, Frederick B. Esler, The office is in Philadelphia.

Michigan Central.—Mr. C. B. Bush has been appointed Division Superintendent in charge of the Main Line east of Michigan City, with the Air Line, the Grand Rapids and the Kalamazoo & South Haven divisions; office at Jackson, Mich.

Mr. W. A. Vaughan has been appointed Division Superintendent of the Saginaw & Mackinaw Division; office at Bay City, Mich.

Mr. Bush has been Division Superintendent for several years, having charge at first of the Grand Rapids and lately of the Saginaw &

Barlow President; F. A. Brooks, Vice-President; A. G. Sanford, Clerk and Treasurer.

Wabash, St. Louis & Pacific.—The following appointments are announced by General Manager Gault: General Superintendent Eastern Division (Wabash road), R. Andrews, Toledo; General Superintendent Western Division (St. Louis, Kansas City & Northern), Thomas McKissock, St. Louis; General Freight Agent, A. C. Bird; Assistant General Freight Agent, M. Knight; General Ticket Agent, C. K. Lord; General Passenger Agent, H. C. Townsend; Purchasing Agent, R. W. Green; Paymaster, George P. Sheppard, Commercial Agent at Toledo, J. M. Osborne; Commercial Agent at St. Louis, C. W. Bradley. These are all reappointments of officers of the two roads now consolidated.

PERSONAL.

—Major W. F. Downs, General Superintendent of the Central Branch, Union Pacific, has received leave of absence and will go to Europe for several months with the hope of improving his impaired health. Just before starting from Atchison, Major Downs received a dispatch from the President stating that \$2,500 had been deposited to his credit in New York for the expenses of his trip, and passage engaged for himself and family from New York to Liverpool.

—Mr. Frederick W. Jones, Roadmaster of the Cleveland, Mt. Vernon & Delaware road, was thrown from a freight car on which he was riding near Killbuck, O., Nov. 19, and had a leg broken and was otherwise badly bruised.

TRAFFIC AND EARNINGS.

Railroad Earnings.

Earnings for various periods are reported as follows:

Year ending Sept. 30:	1878-79.	1877-78.	Inc. or Dec.	P. c.
Naugatuck.....	\$499,188	\$477,834	I.	4.5
Net earnings.....	222,275	197,170	I.	12.7
Ten months ending Oct. 31:				
Pennsylvania.....	\$28,034,353	\$28,035,337	I.	7.7
Net earnings.....	11,379,036	10,845,556	I.	4.9
Nine months ending Sept. 30:				
Mobile & Montgomery.....	\$474,980	\$452,281	I.	5.0
Pitts., Cin. & St. Louis.....	2,441,800	2,302,358	I.	6.1
Net earnings.....	953,241	894,218	I.	6.6
Month of September:				
Atlanta & Charlotte Air Line.....	\$73,220	\$53,588	I.	36.6
Cin., Ham. & Dayton.....	292,001	193,394	I.	35.5
Mobile & Montgomery.....	61,215	41,413	I.	47.8
Pitts., Cin. & St. Louis.....	382,835	280,531	I.	36.5
Month of October:				
Intercolonial.....	\$138,509	\$135,138	I.	1.1
Pennsylvania.....	3,518,144	3,215,419	I.	9.4
Net earnings.....	1,085,929	1,559,547	I.	8.1
First week in November:				
Min. & St. Louis.....	\$9,020	\$7,954	I.	20.9
Second week in November:				
Chicago & Alton.....	\$152,101	\$101,025	I.	49.7
Chi. & Eastern Ill. & St. Paul.....	22,403	17,845	I.	25.6
St. L., Iron Mt. & So.....	272,000	184,804	I.	47.1
Wabash.....	161,800	149,071	I.	8.1
Net earnings.....	120,868	112,070	I.	7.3
Week ending Nov. 14:				
Great Western.....	\$104,020	\$81,333	I.	27.9
Week ending Nov. 15:				
Grand Trunk.....	\$220,128	\$190,935	I.	11.8

Lake and Canal Rates in October.

The Buffalo Commercial Advertiser says: "The 'boom' that is affecting all branches of business is very plainly discernable in transportation affairs. The amount of property seeking shipment was probably never greater than it has been this fall. Vessels, canal-boats, railways and all kinds of transportation routes are fully occupied. The natural result of this increased demand for freight room is better rates. The following exhibit shows the average rates of freight on wheat and corn from Chicago to Buffalo by lake; and the average on the same cereals from Buffalo to New York by canal for the month of October in the years named:

Year.	Lake. Wheat. Corn. cents.	Canal. Wheat. Corn. cents.
1870.....	8.5	7.6
1871.....	10.1	9.7
1872.....	10.5	15.5
1873.....	7.8	6.8
1874.....	4.1	3.8
1875.....	3.7	3.4
1876.....	4.4	4.0
1877.....	4.9	4.4
1878.....	3.6	3.3
1879.....	7.7	7.1

"It will be observed that the average by lake for last month is the highest for any corresponding month since the panic. But when the difference in the vessels in respect to size, economical management, etc., is taken into account, last month's rate will return more profits than that for October, 1873. And when the reduction of tolls, the increased tonnage and improved condition of the canal are considered, it will be found that boatmen are doing better this year than they did in 1873. In short, it may be safely said that vessel-owners and boatmen are making money this year; but we know of no class of business men that stood more in need of a profitable account than these same vessel-owners and boatmen."

Lumber Rates to Missouri River Points.

It has been determined by arbitration to diminish the difference between Chicago and St. Louis rates for lumber to Missouri River points by 2 cents per 100 lbs. The rate from Chicago remaining 25 cents, the rate from St. Louis (and other Mississippi River points) is advanced from 15 to 17 cents.

Coal Movement.

Coal tonnages are reported as follows for the week ending Nov. 15:

	1879.	1878.	Inc. or Dec.	P. c.
Anthracite.....	604,942	515,372	I.	17.4
Semi-bituminous.....	102,482	78,821	I.	30.0
Bituminous, Pennsylvania.....	32,688	42,807	I.	23.1
Coke, Pennsylvania.....	25,437			

Cumberland shipments are the largest for a long time.

In the United States Circuit Court at Pittsburgh, Nov. 22, the administrators of J. B. McCreery, of Philadelphia, filed charges of mismanagement against the Receivers of the Lehigh & Wilkesbarre Coal Company. It is alleged that the mining on the company's lands was turned over to two contractors, who have made very large profits out of the business, and that coal has been sold through certain brokers at a price below that obtained by others for the same kind of

coal. The Court granted a rule on the Receivers to show cause why they should not be required to give bonds.

The Fottsville (Pa.) *Miners' Journal* thus comments on the present condition of the anthracite coal trade: "The trade could not be in a better condition, except that the price is still lower in proportion to cost than most of the other commodities that have felt the influence of the improved condition of the business of the country, and it is therefore not improbable that another advance will be made in December. Coal ought now to be selling at \$4 a ton, and only when it reaches that figure will the operator receive a fair remuneration for his product. That coal will command even more than that price in the near future we have not the least doubt, and it is safe to estimate upon \$4 a ton as the minimum price as long as the business of the country continues in its present healthy condition."

"In 1873, the year that ushered in our long season of financial and industrial oppression, the average price of coal sold on board vessels at Philadelphia, was \$4.37; in 1874, \$4.55; in 1875, \$2.39. In 1877, the average price for the year was \$3.40. The lowest average price received for coal during a period of 43 years prior to this last decline was \$3.20 per ton, in 1844, while in 1864 the average price was \$5.39. But the figures of the three years above quoted, from 1873 to 1875 inclusive, before the financial depression had succeeded in effectually crushing business enterprise, represent the normal condition of the coal trade, and now that the business has gotten back to a condition of similar activity with that period, it is not unreasonable to expect that coal will advance to the figures which represent its price at that time."

"The companies and individual operators may be said to have reached the limit of their capacity to mine coal with the present openings. Twenty-five million tons will be sent to market this year as the result of operations conducted without intermission from the first day of January to the fifteenth day of December. This large product has all been sold, and there is no great accumulation in the hands of dealers—none at all in first hands. The demand next year will naturally be greater than this, so that it will require some additional facilities to meet it. If these facilities are added with judgment, there need be no fear of the future of the trade; on the contrary, there is every indication of a long period of prosperity."

Coal shipments from Seattle, Wash. Ter., in October were 9,898 tons. For the ten months ending Oct. 31, shipments were 111,178 tons. This coal is brought down over the Seattle & Walla Walla road, and nearly all of it goes to San Francisco.

Petroleum.

Stowell's *Petroleum Reporter* gives the following statement of the production of the Pennsylvania oil wells for October, in barrels of 42 gallons:

	1879.	1878.	Inc. or Dec.	P. c.
Production.....	1,830,378	1,370,797	I.	34.3
Shipments.....	1,662,269	1,747,390	D.	4.9
Stock, Oct. 31.....	7,794,634	4,217,709	I.	84.6
Producing wells.....	11,880	10,180	I.	16.5

The pipe line reports for the month make receipts 1,881,150 barrels; deliveries, 1,710,585 barrels; stock on hand, 7,887,024 barrels.

Pittsburgh receipts for the month were 43,979 barrels by Allegheny Valley road, and 233,996 barrels by pipe line. Shipments of refined oil were 129,030 barrels east by Pennsylvania Railroad, and 19,480 barrels westward.

Wisconsin Lumber Line.

This line has been organized by the Chicago, St. Paul & Minneapolis, the St. Paul & Sioux City, the Sioux City & Pacific, and the Kansas City, St. Joseph & Council Bluffs companies for the purpose of carrying lumber from the Wisconsin pineries to points in Iowa, Nebraska, Missouri and Kansas. Its object is to bring the Wisconsin lumber through those states in competition with the Michigan lumber sent by lake to Chicago and distributed from that city.

Grain Movement.

For the week ending Nov. 15 receipts and shipments of grain of all kinds at the eight reporting Northwestern markets and receipts at the seven Atlantic ports have been, in bushels, for the past seven years:

Year.	North-western receipts.	North-western shipments.	P. c.	Atlantic receipts.
1873.....	2,115,051	2,986,429	638,685	21.4
1874.....	2,584,330	2,537,320	297,809	11.8
1875.....	3,213,054	3,419,362	1,143,631	33.5
1876.....	2,916,023	3,739,754	1,372,271	36.7
1877.....	3,076,648	4,147,443	420,584	10.3
1878.....	4,000,54	4,208,616	732,802	17.1
1879.....	3,918,084	2,978,882	1,106,435	37.1

The receipts of Northwestern markets for the week this year are 23 1/2 per cent. less than for the preceding week, and 45 per cent. less than for the week before that, and are much the smallest since the first week of July. In the shipments of these markets there is also a great decrease, and are the smallest since the first week of April. The rail as well as the lake shipments decreased, but the latter the most, being but about one-third of what they have been some weeks this fall.

The decrease in receipts at Atlantic ports is not so large but these are still the smallest since the middle of July.

Of the receipts at Northwestern markets, 51.3 per cent. was at Chicago, 17 at Milwaukee, 11.7 at St. Louis, 9.5 at Toledo, 4.8 at Peoria, 3.6 at Detroit, and 2.1 per cent. at Cleveland.

Of the receipts at Atlantic ports 60.5 per cent. was at New York, 13.7 at Baltimore, 9.5 at Boston, 8.3 at Philadelphia, 5.8 at Montreal, 2.1 at New Orleans, and 0.1 per cent. at Portland. Philadelphia's and Baltimore's receipts are the smallest since the middle of July, but New York's and Boston's keep up pretty well.

THE SCRAP HEAP.

Railroad Equipment Notes.

The Rhode Island Locomotive Works, at Providence, are to build 25 engines for the Manhattan Elevated Company. The Indianapolis, Cincinnati & LaFayette shops at Cincinnati are turning out six new freight cars a week.

The Hunnewell Machine Works, at Hunnewell, Ky., have recently turned out for the Eastern Kentucky road some flat cars for carrying pig iron, which will take 17 tons at a load.

The Schenectady (N. Y.) Locomotive Works have a large force employed and are running over-time.

The Taunton Locomotive Works, at Taunton, Mass., are building 10 engines for the Union Pacific, four for the Atchison, Topeka & Santa Fe, and one for the Seaboard & Roanoke.

The Nashua Iron & Steel Co., at Nashua, N. H., is filling a very large order for steel tires for locomotive driving-wheels.

The Wabash, St. Louis & Pacific order for freight cars is said to have been distributed as follows: Lehigh Car & Manufacturing Co., Stenton, Pa., 1,100; Michael Schall, York, Pa., 600; Lebanon Manufacturing Co., Lebanon, Pa., 400; Gilbert Car Co., Buffalo, N. Y., 200; Gilbert & Bush

Co., Troy, N. Y., 200. Besides these, 600 are being built in the company's shops.

Iron and Manufacturing Notes.

The rolling mill at Paducah, Ky., is being removed to Riverside, O., near Cincinnati. It will be known as the Riverside Rolling Mill.

The Indiana, Bloomington & Western Company has bought 1,000 tons of steel rails from the Edgar Thomson Steel Works at \$60 per ton.

The Joliet (Ill.) Iron & Steel Works are turning out an average of 320 tons of steel rails a day, running full double turn.

Canal Dover Furnace, at Canal Dover, O., is in blast, running on black band ore from the company's mines.

The Albany City Iron Co. is repairing its two blast furnaces in Albany, N. Y., and expects to start them both up in January, running one on foundry and the other on Bessemer pig iron.

Eagle Furnace, in Vinton County, O., with some 6,000 acres of ore and coal lands, has been sold to James A. Simmons for \$40,000, cash.

The Jefferson Rolling Mill, at Steubenville, O., is running full double turn in all departments.

The Verona Tool Works have made and sold a total of 15,899,198 Verona nut-locks since they began the manufacture. These nut-locks were sold to 113 different roads.

Bridge Notes.

The Boston Bridge Works are building a train-house roof and an overhead highway bridge in Lowell, Mass., for the Boston & Lowell road; also a roof and dome for the new custom-house at St. John, N. B., and several smaller contracts.

A. D. Briggs & Co., of Springfield, Mass., are building a Howe truss bridge, two spans of 100 ft. each, for the New Haven & Derby road.

Wendell Bollman, of Baltimore, has just finished a highway bridge over Big Pipe Creek, in Carroll County, Maryland.

In Sections.

An exchange conveys the startling intelligence that "Engine No. 6 was run in two sections, Saturday night." How this unusual feat was performed is not explained, but no one was hurt and no damage reported, so we conclude that there was no accident about it.

The Pacific Coast sees only the faults of the Chinaman, and will have none of his virtues, but even the Pacific Coast admits that he does not beat his way on the cars. A Central Pacific conductor lately caught one riding on a brake-beam near Reno, and the case was commented upon as extraordinary. All the railroad men testified that they had never caught a Chinaman stealing a ride before.

The City Council of Paterson, N. J., has passed an ordinance limiting trains on the Erie road to a speed of five miles an hour through the city, and passengers swear as the trains crawl along. But the company retaliates by running its freight trains two or three miles an hour, and the swearing is on the other side, as a crowd of people in a hurry to get home to dinner or back to work wait at a crossing for 40 or 50 freight or coal cars to crawl by.

A Railroad Ambulance Corps.

It is proposed to organize the Massachusetts Railroad Ambulance Corps, to care for persons injured in railroad accidents in that state. The plan provides for a central office at Boston, having telephone communication with all the city railroad depots, the Massachusetts General and city hospitals, and with a circle of surgeons. At the central office a surgeon and two trained assistants are to be ready at all times to respond to calls; and a special ambulance always at hand for emergencies. In accidents requiring the attendance of more than surgeon and assistant, any number of surgeons can be summoned from the central office (they are pledged to respond at once) and directed to any given point. Sub-agents are to be appointed along the lines of railroad in the larger towns and cities, so that, when immediate attendance is imperative, the conductor or engineer or any employe has only to consult his ambulance card and discover which regularly-appointed surgeon is nearest him, and send accordingly. Meanwhile, the head-quarters will have been alarmed, the ambulance will be driven at once to the depot, or a whole corps of surgeons and assistants will go when necessary. The railroads are to bear the expense of the system, but it is thought that it would actually result in a saving to the roads in the long run.

Long Trains.

Engine No. 42, on the Wabash Railroad, has been doing some good work. It drew a train of 80 loaded cars and a caboose 94 miles in 7 hours and 20 minutes, using 4 1/2 tons of coal, and working a stroke of ten inches. There were three grades in the run of 30 ft. to the mile, one of them nearly a mile in length. The weight of the train was 1,009 tons. The engine weighs 80,000 lbs., and her cylinders are 17 x 20. On another trip the same engine took 107 empty and 18 loaded cars the same distance in 8 hours, length of train being 4,090 ft.—*LaFayette (Ind.) Times*, Nov. 23.

Tramp Transportation.

"The railroad company ought to have a special car for tramps on every train. Then the conductors and brakemen would not have to spend half their time looking after tramps. You see there is bound to be just about so many people going over the road in a year. They will all go in some way or other, and it would be cheaper for the railroad companies just to have a plain tramp car attached to every train. There wouldn't be so many accidents on the road, and the wood piles and snow sheds would be safer."

"There is a great difference among tramps. The fellows that carry blankets strapped to their backs are seldom professionals. The true tramp scorns baggage of any kind. Conductors and brakemen can't bear these fellows that carry blankets. They are called blanket stiff on the road. Those fellows seldom know enough to ride a beam, but will squat right down on the front platform or the roof of a car, and get put off at the first station. When a crowd of tramps get together they are pretty bold. I was once with eight others out on the desert near Ogden. We boarded a freight, and all sat up on the roof of a box car. There were two or three revolvers in the crowd, and the boys wouldn't stand any nonsense. Pretty soon the conductor came along and said, 'Well, boys, where are you bound this trip?' 'None of your business,' was his answer. And he went right along and hadn't a word to say."

"Tramps commonly ride on the brake-beams in going short distances. Most any tramp can get on any freight train going at full speed, which is only about 10 or 15 miles an hour. They grab the iron rod near the door of a box car and swing one foot on the end of the nearest brake-beam. If they catch the rod and get one foot on the beam it is very easy to swing in under the car. Stretched out on the beam and holding on to the rods that support it, it is easy enough to travel. Of course, if the car jumps the track, or the beam breaks, you're a dead man. One of the most popular ways of traveling is riding the rod. Under the truck of all passenger cars and midway between the wheels, an iron rod crosses horizontally, about on a level with the axles. To

ride the rod, you get a piece of board about two feet long, and resting it on the rod, you have a fine seat. You lean back, hold on to the truck over head and your feet rest on the brake-beam and keep you from tumbling over backward. It's a fine way to ride, but you can only get on the train that way while it is standing still in the station. Once on the rod, the tramp is safe from observation. It is almost impossible for you to see him unless you look before the train starts. A good way to ride is to get into the tool chest under the catoose. It has a door that opens under the car, and that is often left unfastened. Four or five tramps often get in there together. A common way of stealing a ride, especially for long distances, is to get sprung into a box car. It is a very easy thing to spring a car door open, and there is almost always some one around that will spring you in. They take a fish-plate and pry the lower edge of the door off the bar which holds it in place. Then it is easy enough to spring out the corner far enough to let a man get in. You take a fish-plate in with you and pry yourself out at any place you please. Or, if you have no fish-plate, you make a noise and they will let you out, kick you, may be. Sometimes two or three tramps get into a car together, take a supply of water and plenty to eat, and ride along for days as far as they want to go.

"How about the tin seals on the cars?"

"Well, some tramps can pick them open with a knife, and fasten them in again, but it takes time. As a general thing the brakeman will let a man ride in a box car for a little coin. They tell you to keep out of the way of the conductor and it will be all right. As a general thing the train-men treat a decent, quiet tramp pretty well. I have often had engineers and firemen take me in to dinner with them and punch their tickets for me after I had been breaking car for a ride."—Interview with Tramp, in Reno (Nev.) Gazette.

British Rail Exports.

The exports of steel and iron rails from Great Britain for the month of October, and the ten months then ending, are reported as follows, in tons of 2,240 lbs:

	1879.	1878.	Inc. or Dec.	P. c.
October.....	1879.	1878.	Inc.	4,955
Steel.....	29,595	24,640	Inc.	381
Iron.....	8,220	7,845	Inc.	4.8
Total.....	37,821	32,485	Inc.	5,336
Ten months:				
Steel.....	283,989	219,242	Inc.	64,747
Iron.....	43,178	104,298	Dec.	61,120
Total.....	327,167	323,540	Inc.	3,627

The increase for the ten months, it appears, has been but trifling. This year's exports have been sufficient to lay 3,718 miles of track with 56-lb. rails.

The exports to the United States of rails simply, we do not find reported for the ten months, but for October they were 5,971 tons of iron and 481 of steel, against more last year, and nearly three-fourths of all the iron rails exported in October went to the United States. Of "railroad iron of all kinds," the total exports of which this year have been one-fifth more than the exports of rails, the exports to the United States have been:

	1879.	1878.	Increase.	P. c.
October.....	4,468	75	8,390	8,190
Ten months.....	31,989	911	31,078	3,411

The total for the ten months is sufficient for 364 miles of track, of 56-lb. rails.

The Woman Who Was Posted.

For once in the history of the Union Depot its roof has sheltered a woman who knew just where she wanted to go, the train she was to take, the hour for departure, the fare, and the time of arrival. She appeared to be about 45 years of age, and she had flat feet, a peaked nose, and a voice which didn't admit of any argument. No notice might have been taken of her among the scores of others had she not inquired the way to the waiting-room, and added, "Thank ye, though it's your business to answer all questions! That's all I want to ask of you, and you can continue your promenade!"

"Going out on the train?" queried the officer.

"Would I lug a big carpet-bag down here and stand around in the cold if I wasn't?" she sharply answered.

"Going South I 'spose?" he queried, as she moved away.

"Spouse away, then!" she snapped, as she lifted her satchel.

Entering the ladies' waiting-room, she found the seats all taken. A portly man, reading a paper and taking a heap of comfort, occupied one of the seats, and, halting before him, she dropped her satchel with an awful thud, and said:

"Now you git right out here! This place is for ladies, and you are a great big, fat man, and orter be ashamed of yourself for crowding in among us!"

"I—ah—ah—" he began, when she interrupted:

"Then stand up! My legs are tired walking down here, and I'm not going to stand around while you sit down!"

"Certainly—allow me—ah—yes!" he stammered, as he rose up and gave her the seat.

"That's more man-like," she growled, as she settled down, "but it seems to me that if I was you I'd feel sort o' sneaking like in here! The more I see of fat men, the worse I hate 'em."

The fat man had a wife and two children in there, but he wasn't a minute getting through the door. For the next fifteen minutes the old lady sat very erect and stared around her, and then started out to get her ticket, lugging her satchel on her hip. A boot-black espied her and called out:

"Shell I carry your baggage-wagon, Aunt Sary?"

"Boy!" she replied as she dropped the satchel and reached for his collar. "I haven't got any baggage-wagon; and, in the next place, I'm not Aunt Sary to anybody! If you want your heels jerked over the roof of this depot you just give me the least of sass!"

"Scuse me, but don't pinch so hard," said the boy, and he squirmed out of her clutch and retreated a safe distance to look at her and rejoice that he was not her son.

She walked up to the ticket-window, put down a lot of silver, and said:

"I want a ticket to Jackson, and I don't want any talk about it! I know why I'm going, how long I want to stay, and who I'm going to see."

Her ticket was handed her without a word, and, as she passed on to the gate, she said to the official there:

"Tend right to your business! There's no occasion for your asking where I am going or if I've got a ticket!"

"Pass on, madam," he replied.

"Don't try to flatter me!" she called back. "Your business is to see that passengers git on the right train, and the less you madam around the better it will be for you!"—Detroit Free Press.

First Things.

Hon. E. P. Walton, in the Montpelier (Vt.) Watchman, makes the following statements concerning early steamboat and locomotive ventures in Vermont:

"Amos S. Blake, now at Waterbury, Conn., claims that when at work with R. & J. Wainwright, at Montpelier, about 1832, he constructed a locomotive for Asa Harrington, of Middlesex, Vt., to exhibit the working of a railroad. He says it was exhibited in the State House, and drew a gentleman and a lady on a small railroad track. A search of the newspaper files of that period reveals no notice of the then novel locomotive, but the Hon. Daniel Baldwin, now living, says that he witnessed an exhibition of this miniature locomotive at the Obadiah Eaton tavern in Montpelier."

"It has long since been established that the first steamboat in this country was constructed and run in 1792 or '93 by Samuel Morey, of Fairlee, Vt., formerly of Orford, N. H."

Mr. Baldwin gives new and satisfactory testimony. Fulton successfully ran his first steamboat, the Clermont, in 1807. It was, of course, the subject of conversation all over the country. In 1808, four citizens of Orford and Lyme, New Hampshire, were employed with Mr. Baldwin in finishing the first state house here. They were Solomon Washburn (afterward an architect in Boston), Solomon Conant, John Strong and Benjamin Franklin. These all spoke from personal knowledge of the fact that Morey's steamboat long ante-dated Fulton's. But there is better evidence still, to wit: Several years later than 1808, Mr. Baldwin met the father of A. B. Norris, of Barnet, the father being more than 80 years of age, who informed Mr. Baldwin that he aided in the construction of Morey's steamboat, and accompanied him on his first and successful experiment, steaming up the Connecticut River about three miles, and then back again. Mr. Norris added another fact, which tends to relieve Fulton of the odium of stealing Morey's invention. Shortly after his successful experiment, Morey started ostensibly for Washington city, it was supposed for the purpose of obtaining a patent. In about a fortnight Morey returned without a patent, but his pockets filled with money, out of which he paid all the men who had been employed by him. The inference seems to be fair that Morey sold his steamboat invention. It is certain that Morey obtained patents for the use of steam, and actually constructed and operated a steam mill, but there is no evidence that he obtained a patent for a steamboat.

A New Chicago Elevator.

The Chicago Inter-Ocean of Nov. 14 says:

"A few months ago Armour, Dole & Co. commenced the construction of a large, new grain elevator in Mason slip, South Branch (between Twenty-second street and the river, west of Halsted street), and yesterday afternoon steam was in the new building, and a quantity of grain was elevated to test the machinery. Such quick work in the construction of such an immense building of the kind is seldom witnessed, and yet every detail has been looked to, and no pains or expense have been spared to make the elevator the most substantial and complete, as it is the largest, in the world. In the laying out of the bins, the location of the legs, or spouts, and especially in the machinery, every latest improvement has been introduced. Cars from any railroad entering the city can be switched to this new house, and it is so laid out that very rapid time can be made in elevating grain from the cars or from the canal boats, and lightning dispatch can be given sail vessels or propellers loading. As a matter of fact, Messrs. Armour, Dole & Co., who themselves own and control several other elevators, set out to surpass in this new house every other structure of the kind in existence anywhere, and several experts who visited it yesterday afternoon agreed that they had succeeded. It has capacity for 1,800,000 bushels. It is located very high up in the South Branch of the river, but with the dredging that must be done next spring it is not thought that large vessels will experience trouble towing down and out of the harbor. The new house will be ready for business on the 1st of December. Chicago's entire grain storage capacity is now as follows:

	Bushels.
Central "A," J. & E. Buckingham.....	1,000,000
Central "B," J. & E. Buckingham.....	1,500,000
Central Crib, J. & E. Buckingham.....	250,000
Armour, Dole & Co.'s "A".....	1,250,000
Armour, Dole & Co.'s "B".....	800,000
Armour, Dole & Co.'s "C".....	1,500,000
Rock Island "A," Flint, Odell & Co.....	650,000
Rock Island "B," Flint, Odell & Co.....	1,100,000
Galena, Munger, Wheeler & Co.....	700,000
Air Line, Munger, Wheeler & Co.....	700,000
Northwestern, Munger, Wheeler & Co.....	500,000
Fulton, Munger, Wheeler & Co.....	300,000
City, Munger, Wheeler & Co.....	1,000,000
Union, Munger, Wheeler & Co.....	800,000
Illinois River, Wm. Dickinson & Co.....	175,000
National, Vincent & Co.....	1,000,000
Chicago & St. Louis, Vincent & Co.....	1,000,000
Neely & Hamilton's, Illinois Trust & Savings Bank.....	50,000
Chicago & Danville, J. F. Armour.....	350,000
Chicago & Pacific, Chicago & Pacific Elevator Company.....	100,000
Armour & Dole's "D".....	1,800,000

Total capacity.....16,955,000

"Angus Smith is constructing a new elevator at Milwaukee, but it is not nearly so large as this "D" house of Armour & Dole's. Detroit has recently erected a new elevator, and is about enlarging it, and may erect still another the coming winter. An additional house will probably be built also at Toledo. A year from now Baltimore will have the largest elevator in the world, but at present Chicago is ahead. The Baltimore & Ohio Railroad is now laying the foundation at Baltimore for a great receptacle that will have capacity for 2,400,000 bushels."

A Conductor's Windfall.

Two of the conductors of this road (the New York, New Haven & Hartford) have recently closed their connection with it, one of them after about 30 years of service. These men—conductors—meet all sorts of people. It is some time since the story of one of Conductor McKinney's adventures on this road has been re-told. "A many years ago," one night while he was taking up fares, a man without a ticket offered him a large bill, and he, as conductors are apt to do, took it along, saying he would soon return with the change. The purpose of these delays is to make a quiet study of the bill in the baggage-car and see if it is all right. When he reached the baggage-car with the bill, Mr. McKinney found what he had taken to be \$100 was a bill for \$1,000. He returned to the passenger and found he had shifted his seat. Telling him there was a mistake—that the bill was for \$1,000—he was amazed to have the fellow repudiate the whole arrangement. He knew nothing of it, and insisted, and was supported by a friend's testimony, that he had a ticket and that it had been taken up. Finally Mr. McKinney went off with the bill, which the next day, he turned into the company with his explanation. It was deposited here in the Phenix Bank, as a special deposit, and drew interest for several years, was never claimed, and finally was given to the conductor by the company. The only explanation was that some bank burglars were on the train; that one of them carelessly took out the wrong bill, and that they decided it was safer to lose \$1,000 than to risk being arrested. Probably they thought he knew of the burglary. One story had it that this was a bill of the company's, and that the operation was the trick of a "spotter" to catch this conductor stealing, but a company, managed as this one was in those days, would not go scattering \$1,000 bills around even for the sake of tempting an honest man to be a thief.—Springfield Republican.

OLD AND NEW ROADS.

Atchison, Topeka & Santa Fe.—Track-laying is now progressing steadily from Las Vegas, N. M., toward the Rio Grande, and the road is expected to reach the river by Jan. 1. Contracts have been let for grading the Santa Fe Branch, which leaves the main line at Cañoncito, crossing

the hills at Bishop's Ranch, and runs to Santa Fe, a distance of 18 miles. The grading is to be finished in 60 days.

A report comes from St. Louis that this company and the St. Louis & San Francisco have concluded an agreement for the building of a line from near Santa Fe, through to San Francisco, under the Atlantic & Pacific charter, to be owned jointly by the two companies.

Atchison, Topeka & Santa Fe and the Denver & Rio Grande.—A dispatch from Denver, Col., Nov. 20, says: "In the Supreme Court to-day, an opinion was delivered in the case of the Atchison, Topeka & Santa Fe Railroad against the People ex rel. Attorney-General, in error from the El Paso County Court. This case grew out of the action of Attorney-General Wright, taken at the same time the Rio Grande property was wrested from the control of the Santa Fe Company. The court reversed the judgment of the El Paso County Court, with instructions to dismiss the proceedings. The decision was decidedly adverse to the position assumed by the Attorney-General."

"The celebrated Grand Cañon cases were opened to-day in the Federal courts. Their consideration will probably consume a week. To-day only two arguments were made, and they consumed the entire session. Able counsel is retained on both sides, and preparations are made for a determined and protracted contest."

Atlantic & Great Western.—A dispatch from London says: "The Reorganization Trustees of the Atlantic & Great Western Railroad Company have made an agreement with a number of London, Amsterdam and Paris bankers, and Kuhn, Loeb & Co., of New York, for the formation of a successor company, to be called the New York, Pennsylvania & Ohio Railroad Company. The syndicate of bankers agrees to furnish the funds required for narrow-gauging the road, and for the payment of preferred claims of the old company which will now be brought to a speedy foreclosure."

There is a report that the plan now adopted is to include the future construction of a line to Chicago, and also an extension from some point west of Salamanca to connect with the Philadelphia & Reading lines at or near Williamsport, thus cutting loose from the Erie and securing an independent outlet to New York, but this is not at all probable for the present at least.

The Pennsylvania Court of Common Pleas has granted a decree of foreclosure and sale concurrent with those already secured in the courts of New York and Ohio. The legal preliminaries to the sale are now completed, and it will probably take place in January next.

Baltimore & Chicago.—Much interest has been excited in the towns on the line of this proposed road in Ohio, and it is thought that work will probably be begun soon. The Ohio company is to build from Chicago Junction on the Baltimore & Ohio eastward to the Pennsylvania line, about 120 miles, the line passing through Ashland, Wooster, Canton and New Lisbon.

Black River.—The town of Neillsville, Wis., has voted aid to this road, which is to extend from that place southwest about 15 miles to Merrillan, the crossing of the Green Bay & Minnesota and the Chicago, St. Paul & Minneapolis roads.

Boston, Clinton, Fitchburg & New Bedford.—At the annual meeting next week the stockholders are to vote on a plan for refunding the present debt of the company in new bonds at a lower rate of interest.

Boston, Hoosac Tunnel & Western.—The New York Court of Appeals has sustained the Supreme Court decisions in the matter of the crossings of the Troy & Boston track, except in one instance, where it ruled that the application was not properly made. In this case the crossing was over the track of the Troy & Bennington road, which is leased by the Troy & Boston, and the Court holds that the application should have been made in the name of the company owning the road, and not of the lessee. The Troy & Boston claims that in this case a new application must be made and the case all gone over again; if so, it will delay the completion and opening of this road two or three months.

Burlington, Cedar Rapids & Northern.—The line which this company is building out westward through Washington and Keokuk counties in Iowa, does not start from Iowa City directly, as has been heretofore stated, but is an extension of the Muscatine Division from Riverside westward. It is, we believe, to be connected with Iowa City by a line running from that place southward, down the Iowa River to Riverside. The division has been in operation for some time to Wellman, 14 miles beyond Riverside and 45 from Muscatine. Track is now laid to Thornburg, 22 miles westward from Wellman, and 67 from Muscatine, leaving only about five miles to complete it to What Cheer, where there are extensive coal mines.

Camden & Atlantic.—A conference of parties interested in the projected branch to Cape May was held recently, and the matter fully discussed. The line, as now proposed, will leave this road at Winslow, N. J., 26 miles from Camden, and run directly to Cape May, and will be 42 miles long. The work generally will be light, and the estimated cost is not over \$10,000 per mile, so that net earnings of \$600 per mile yearly would pay fair interest on the investments. If built, arrangements will probably be made by which the New Jersey Southern will share in the ownership, or at least have the right to run trains over the road. The credit of the Camden & Atlantic Company is very good, and there will be no difficulty about getting the money if it is decided to build the road.

Canadian Pacific.—The contracts for the 125 miles of road from Yale to Kamloops, in British Columbia, were awarded as follows:

Sub-section 1—Duncan McDonald & Co., \$2,727,300.
Sub-section 2—Messrs. Purcell, Ryan, Goodwin & Smith, \$2,578,000.
Sub-section 3—Duncan McDonald & Co., \$2,056,950.
Sub-section 4—Messrs T. & M. Kavanagh, \$1,809,150.

Central Branch, Union Pacific.—On the extension of the North Solomon Division track is now laid to Kirwin, Kan., 15 miles westward from the late terminus at Gaylord, and 242 miles from Atchison. The first train entered the town Nov. 24, and regular trains begin to run shortly.

The rumored sale of a controlling interest in this road to Jay Gould and others has not been confirmed, nor has it been explicitly denied.

Central & Montgomery.—The iron for the completion of this road has arrived, and track-laying is in progress. The grading was all finished several months ago. The road is completed from Navasota, Tex., on the Houston & Texas Central, to Plantersville, 12 miles, and the section to be finished is from Plantersville to Montgomery, 13 miles.

Chicago & Northwestern.—Articles of incorporation have been filed for a branch from the Menominee River road near the line between Wisconsin and Michigan, northwest 11 miles to some new iron mines.

Arrangements are being made to change the Des Moines division (the Des Moines and Minneapolis road) from 3 feet

to standard gauge. It is reported that the company intends to build this line from Des Moines southwest with a view of reaching Kansas City, which would be a sort of an offset to the Rock Island's acquisition of the Burlington, Cedar Rapids & Northern.

This company recently began to take freight from Chicago to the Missouri River points by way of its own road and the Kansas City, St. Joseph & Council Bluffs from Council Bluffs. A few days after, however, it agreed to suspend action in the matter until the next meeting of the Southwestern Association. It does not, it is said, intend to surrender its claim to that business, but merely to await the action of the Association in the matter.

Chicago, Milwaukee & St. Paul.—The track of the Hastings & Dakota Division is now completed to Ortonville, Minn., on Big Stone Lake, on the border between Minnesota and Dakota, 30 miles beyond the late terminus at Appleton, and 302 miles from Hastings. This will be the terminus for this winter, and probably for a longer time. A branch of this division from Vermillion, Minn., to Bridgeport, one mile, has also been completed.

The Iowa & Dakota Division is now finally located and partly graded from Firesteel, on the James River, to Brule City, Dak. Trains on this division now run regularly to Marion Junction, 287 miles west from the junction with the Iowa & Minnesota Division at Calmar.

Work is progressing well on the short line between St. Paul and Minneapolis. It has been decided to lay a second track over the whole of this branch.

Chicago Park & Transfer Co.—This company has filed articles of incorporation for a steam railroad to connect the several parks around Chicago. The line as specified in the articles is from Lawndale to the northwest corner of the city, thence to Lincoln Park, at the northeast corner of the city, and from Lawndale to the southwestern part of the city and eastward to South Park. The incorporators are John L. Beveridge, A. E. Bishop, Charles L. Bonney, W. W. Hill and D. O. Strong, all of Chicago.

Connecticut Western.—At the recent annual meeting the following statement was made for 18 months ending Sept. 30:

Gross earnings (\$5,069 per mile).....	\$344,725
Expenses (77.34 per cent.).....	266,823
Net earnings (\$1,146 per mile).....	\$77,902
Interest, etc.....	14,191
Surplus.....	\$63,711

During the 18 months the floating debt has been reduced \$50,613, and \$12,918 expended on new construction and equipment, making \$63,537 paid out in improving the condition of the company.

Corning, Des Moines & St. Louis.—This company has been organized to build a road from Des Moines, Ia., southeast by Corning and Clarinda to a connection with the Wabash, St. Louis & Pacific's Omaha line. The distance is about 110 miles.

Decatur, Mattoon & Southern.—It is stated that this road has been sold for \$200,000 to the Pekin, Lincoln & Decatur Company, which will take possession at once. The road extends from Mattoon, Ill., to Hervey City, 32 miles, and its trains run over the Illinois Midland track from Hervey City to Decatur, 8 miles. It was originally the Decatur, Sullivan & Mattoon, and was sold under foreclosure some three years ago.

Denver, South Park & Pacific.—This company has been receiving proposals for building a tunnel 1,500 feet long in Alpine Pass, at the head of Chalk Creek, in the Sawatch Mountains. This is on the line of the proposed extension, which is to leave the Leadville line at the junction of Trout Creek with the Arkansas and run across into the valley of the Gunnison and on to the Uncompahgre and San Juan mining regions. This extension will open up deposits of coal said to be very valuable.

Detroit River Crossing.—The Board of Engineers charged to report to the Secretary of War on the proposed crossings of the Detroit River, met in Detroit last week pursuant to adjournment. Their session lasted several days and was almost entirely occupied in hearing a large number of remonstrances from shipowners and others interested in like navigation against the construction of any bridge over the river. The sessions of the board are now closed, as the report must be sent to the Secretary before the meeting of Congress.

Dubuque & Dakota.—Arrangements are being made to extend this road from Waverley, Ia., eastward about 45 miles, to Wadena, to connect with the Turkey River Branch of the Chicago, Clinton, Dubuque & Minnesota road.

Evansville, Owensboro & Nashville.—The city of Evansville, Ind., has voted by a large majority to give \$100,000 to this road, which is to connect the city with the Owensboro & Nashville road and through it with the Nashville, Chattanooga & St. Louis. Under the conditions of the vote work must be begun in 20 days, and the road finished in 15 months.

Freehold & New York.—It is said that work will soon be begun on an extension of this road from Freehold, N. J., west by south to Allentown, about 18 miles.

Geneva, Hornellsville & Pine Creek.—An adjourned meeting is to be held in Hornellsville, N. Y., Nov. 28, to vote upon the question of consolidating this company with the Ontario Southern. The company owns no completed road, but has, at different times, done some grading on a line from Hornellsville, N. Y., northeast to Geneva. The Ontario Southern owns a line from Sodus Point, N. Y., on Lake Ontario, southward to Stanley, 34 miles, joining the line of the other road at Stanley.

George's Creek & Cumberland.—This company is progressing steadily with the work on its road, though somewhat delayed by tedious litigation over right of way.

Indianapolis, Cincinnati & LaFayette.—In the United States Circuit Court in Indianapolis, Nov. 24, a final decree of foreclosure and sale was entered against this road in the suits which have been pending for some time. The date of sale is not yet agreed upon.

International & Great Northern.—Texas papers report that this company's engineers are busy locating the extension of the road from Austin, Tex., to San Antonio. The distance is about 80 miles, and it is stated that work is to be begun very soon. The intention of the company always has been to build to San Antonio and beyond that city to the Rio Grande, and the extension has only been delayed by its financial embarrassments. Its completion is likely to have a serious effect on the earnings of the Galveston, Harrisburg & San Antonio road.

Kansas City, Lawrence & Southern.—Sealed proposals will be received in Boston until Dec. 1, by Charles Merriam, Trustee, under the agreement between this company and the Kansas City, Ft. Scott & Gulf, for the sale to him of this company's bonds to the amount of \$33,399.17,

that being the amount in his hands applicable to the purchase. Bonds must be of the issue of April 1, 1879, and of numbers between 1 and 9, inclusive, or between 401 and 637, inclusive.

Keystone.—There is some speculation in Philadelphia over a company of this name, which has filed articles of incorporation under the general law, to build a railroad described as follows: "From Upper Darby Post-office, in Delaware County, to the intersection of Third and Berks streets, in the city of Philadelphia; also, from the junction of Lancaster avenue and Market street to the intersection of Fifty-second street and Elm avenue, and also from the junction of Market street and Woodland avenue and Darby road to the intersection of Woodland avenue and Fifty-second street. The length of the road will be 10 miles, or thereabout."

One opinion is that it is a plan to build an elevated railroad, while others have it that it is intended to make a connection between the Philadelphia, Wilmington & Baltimore and the New York & Philadelphia New Line. In any event, the road cannot be built through the streets without the consent of the City Council.

Lake Shore & Michigan Southern.—Suit has been begun to recover about \$100,000 taxes and penalties claimed to be due the state of Michigan from this company. The suit is brought to settle a long-standing dispute with the state as to the extent of the company's liability to taxation under the charter of the original companies.

The Detroit Post and Tribune says: "The managers of the Lake Shore road have decided to consolidate the eastern and western passenger departments. Heretofore the road has had two passenger departments, an eastern and western, the former having charge of the business east of this city and Cleveland, and the latter west of these points. One man will have charge hereafter of the entire passenger business of the road." This makes it unnecessary to fill the place of Mr. F. E. Morse, the late General Western Passenger Agent.

Long Island.—The Montauk Point property, formerly belonging to the remnant of the Montauk tribe of Indians, and including the eastern extremity of Long Island, the long, narrow peninsula running out into the Atlantic from East Hampton, was recently sold at public sale. It is said that the purchasers intend to build up a summer resort on the property, and that arrangements have been made for an extension of the Sag Harbor Branch of the Long Island road through East Hampton and Amagansett out upon the point, a distance of about 20 miles.

Louisiana Western.—All the grading on this road is done except a section of 10 miles from Mermonteau, La., to Vermillionville, which will be finished next month. The bridge-work, which is very heavy on this road, is progressing as fast as possible, and the track can all be laid as soon as the bridges are ready and ties enough on hand. It is expected that the road will be ready for business early next spring.

Macon & Brunswick.—Notice is again given that this road will be offered for lease in Macon, Ga., Jan. 13, and that the offer will be continued from day to day, in the discretion of the Governor, until the lease is made upon the terms and conditions prescribed by the act of authorizing the lease. Special notice is given that each and every person claiming to be qualified as the successful bidder of said leasing, and those who are associated with him, will be required to make affidavit that they, or either of them, do not represent, directly or indirectly, any railroad or express company or companies, within the state of Georgia, or a combination of either of them; and that they, or either of them, have no interest in any company running to or from the Atlantic coast at any other point than the city of Brunswick; and that it is their purpose in good faith to fulfill all the conditions and requirements of said acts.

Mercer & Somerset.—This road, which is to be sold this week, will, it is expected, be bought in by the Pennsylvania Railroad Company, which owns all the bonds, or nearly all of them, and it is said that the road will be abandoned and the track taken up. It extends from Somerset Junction, N. J., on the Belvidere Delaware road, to East Millstone, 22½ miles, and is parallel to the Delaware & Bound Brook road, running in sight of it for most of the way. It has never earned its running expenses.

Missouri, Kansas & Texas.—A St. Louis dispatch says: "Pettis County, Mo., of which Sedalia is the county seat, and the head quarters of the Missouri, Kansas & Texas Railroad, has sold its stock in that road, amounting to \$270,000, and the city of Sedalia has sold its stock in the same road—\$80,000 worth. It is understood that Jay Gould bought both lots. Other counties in Central Missouri are selling their stock in this road."

Nashua & Lowell.—This company is preparing to rebuild its passenger station at Nashua, N. H., and will also build there a new round-house and turn-table, a car-house 200 feet long and a coal-shed to hold 2,000 tons of coal. The company has contracted for 800 tons of steel rails.

New Brunswick.—This company proposes to open up a large tract of timber land by building a branch from Kent, N. B., 75 miles from Gibson, up the Shikhehawk and across the headwaters of the Miramichi, and the Nashwaak into the territory around the headwaters of the Tobique. Much of the country along the line is said to be fine farming land when cleared of the timber.

New York Central & Hudson River.—The latest on the subject of the proposed transfer of stock is from the New York Evening Post of Nov. 26, which says:

"The negotiations which have been pending for some days between leading foreign and domestic bankers, represented by Messrs. Drexel, Morgan & Co., of New York, and Messrs. J. S. Morgan & Co., of London, having reference to a purchase of New York Central stock from W. H. Vanderbilt, were terminated to-day. The amount in question is \$25,000,000. The terms have not yet been made public. Mr. Vanderbilt retains his large remaining interest, and will continue in the control and management of the property."

"A general agency for the New York Central Company will be opened in London with Messrs. J. S. Morgan & Co., with a view to the payment of dividends there at a fixed rate of exchange, transfer of stock, etc."

"The London interest will be represented in the New York Central board by Mr. J. Pierpont Morgan, who will immediately be elected a director."

"The Wabash Railroad system with which the New York Central will, through the Lake Shore road, now come into close alliance, is to be represented in the New York Central board by Cyrus W. Field and Solon Humphreys."

"The sale in question is the largest single stock transaction on record. Among the bankers represented in the syndicate are Morton, Bliss & Co., August Belmont & Co., and Winslow, Lanier & Co."

New York & Greenwood Lake.—In the inquest on the engineer killed in the late draw-bridge accident at the Hackensack River, the coroner's jury has given a verdict which hits all around, as it were. They find that the accident was

caused primarily by the carelessness of the dead engineer in not keeping a sufficiently sharp look-out for the signal, but they also censure the bridge-tender for having the draw open when it was not necessary; they find that the company does not exercise proper supervision and control over its employees, and they blame the Freeholders of the county for not exercising the supervision over all draw-bridges which the law requires.

New York & New England.—A report that negotiations were in progress for a lease of this road to the New York, New Haven & Hartford Company has been denied. It is now said, however, that the two companies are considering, not a lease, but some arrangements for pooling and division of business.

The contract for the extension of 40 miles from Waterbury, Conn., to Brewsters, N. Y., has been let to Smith & Ripley, of New York, and work is to be begun soon. A large part of the line has been graded, but so long ago that much work will probably be needed to make it ready for the track.

New York City & Northern.—The track of this road is now all laid from the Harlem River at High Bridge to Brewsters, in Putnam County, N. Y., a distance of 51 miles. There is still work to do in ballasting, preparing stations, etc., and it is uncertain when the road will be opened for business.

Starting from High Bridge, the road runs nearly due north, on a course generally parallel with the New York & Harlem road, and for the first 30 miles about midway between that and the Hudson River. Some 44 miles from High Bridge it turns and runs eastward, ending at Brewsters on the Harlem road. It passes through a section of Westchester and Putnam counties, presenting some advantages for suburban settlement, but not built up as yet, the suburban villages having naturally grown up on the line of the Harlem and Hudson River roads, leaving the country between to the farmers and a few scattered residents to whom convenience to the railroad is not an object. The road is expected to have some business in milk and market produce, but its local passenger business must be light for a good while to come. Its owners probably expect to receive the New York business of the New York & New England road, when that company's extension from Waterbury to Brewsters is completed, though it is not impossible that that business may be given to the Harlem road with its better terminal facilities. For passenger business the new road expects to send its trains into the city by a short line crossing the Harlem River near High Bridge, and connecting with the Metropolitan Elevated road. This connecting line is still to be built.

The road was originally known as the New York & Boston, and in 1872 and 1873 a considerable part of the road was graded and track laid for eight miles north from High Bridge, and for 10 miles west and south from Brewsters. The road was included in the New York, Boston & Montreal consolidation, and after the collapse of that company, foreclosure proceedings were begun under a mortgage given by the original company. The property was sold in March, 1876, and bought by the bondholders, who organized the New York, Westchester & Putnam Company. This company was last year reorganized under the present name, and the completion of the road at once undertaken.

New York, Lake Erie & Western.—The second track over the Delaware Division is completed, giving the company a continuous double track from Jersey City to Burns, 339 miles.

The new depot at Buffalo has been in use some time, and the new elevator there is completed and running. The new round-house and shops at East Buffalo are also completed, and the machinery has been removed from the old shops. Several new depots have lately been built at points along the line. The large round-house at the west end of the Bergen Tunnel is nearly ready for use.

Northern Pacific.—At a recent meeting of the board of directors in New York the following important resolution was adopted:

"Resolved, That the agricultural lands of the company west of the Missouri River to Puget Sound shall be offered for sale to actual settlers at the government price of \$2.50 cash per acre, with an addition thereto of 10 cents per acre, to be paid to the company to reimburse it for the cost of selecting, surveying and conveying said lands."

This resolution does not apply to coal or iron lands, nor to lands chiefly valuable for timber, nor to land required for town sites or suitable for manufacturing sites, nor in regions where water is scarce, nor to lands containing springs or other natural supply, where it shall be for the interests of the settlers at large that water privileges shall not be exclusively held or controlled by any individuals, nor to lands required for the use of the company in connection with the operation of the road.

Old Colony.—At the annual meeting, Nov. 25, the stockholders voted to refer the question of building a branch to Nantasket Beach (as referred to in the annual report) to the board of directors, with power to act as they may deem advisable. [The question of issuing bonds or notes to the amount of \$500,000 was also referred to the directors, with power.]

Pacific Railroads and the Government.—A dispatch from Washington, Nov. 21, says: "The United States Auditor of Railroad Accounts has received a communication from the Vice-President of the Central Pacific Railroad Company, inclosing a check for \$609,080.69, which, in connection with the amounts due the company, and withheld by the United States Treasury for government transportation, both on its subsidized and unsubsidized roads, between Nov. 6, 1869, and June 30, 1873, fulfills the requirements of all existing laws in regard to the payment to the government of 5 per cent. of the company's net earnings during the period named. The payment made by the company last week settled its indebtedness on account of the 5 per cent. requirement, and also discharged its obligations under the Thurman sinking fund law, for the six months following the 30th of June, 1878, from which date the sinking fund obligation was to be computed; and it may be stated, therefore, that the Central Pacific Company has settled all its accounts with the government up to the 31st of last December. The cash payments for the year 1879 will not be due until next February. Vice-President Huntington, in the course of his letter transmitting the check for \$609,080.69, writes to Auditor French as follows:

"In making this payment, I may add that the Central Pacific Railroad Company does not, and never did, dispute the claim of the general government to 5 per cent. of the net earnings of the road after its completion in the eyes of the law. Differences have arisen as to what constituted net earnings; as to whether the 5 per cent. could be taken out of the earnings of non-aided roads, and as to the date when this participation should begin. These points have been but recently decided, so that an approximate settlement can at last be reached. There remains the question as to whether the Pacific Railroad companies are receiving the reasonable compensation for services stipulated by the acts of 1862 and 1864, and by common business equity due. In regard to the mails, in particular, the railroad companies do not receive

what the exceptionally onerous service is worth, but only so much as Congress, in its discretion, sees proper to allow. The Central Pacific Railroad Company reserves the right to appeal to the courts for redress of this and like grievances; and this payment I desire to be understood as being subject to that reservation. This 5 per cent. when accurately ascertained, we have always regarded as the right of the government, but the 20 per cent. and half the earnings from government business, taken and withheld in excess of the 5 per cent. under our contract for the period subsequent to June 30, 1878, (as required by the Thurman act of Congress), we must regard as having been wrongfully extorted from the company, in defiance of justice, equity and good faith, in fact, by the law of the strongest."

Pennsylvania.—This company's statement for October shows for all lines east of Pittsburgh and Erie, as compared with October 1878:

An increase in gross earnings of.....	\$302,725
An increase in expenses of.....	176,343
Net increase.....	\$126,382

For the ten months ending Oct. 31, as compared with the same period in 1878, the same lines show:

An increase in gross earnings of.....	\$1,990,019
An increase in expenses of.....	1,465,539
Net increase.....	\$524,480

For the ten months of this year all lines west of Pittsburgh show a surplus over all liabilities of \$980,599, being a gain of \$597,996 over the same period last year.

Pennsylvania Railroad, in Maryland.—Arrangements have almost been concluded for the running of trains over this road from Cumberland, Md., to the Pennsylvania state line. A temporary depot will be established in Cumberland until the permanent station is completed.

Philadelphia & Reading.—This company's statement is as follows for October and the eleven months of its fiscal year from Dec. 1 to Oct. 31:

	October.	Eleven months.
Gross earn.:	1878. 1879.	1878. 1879.
Railroad traffic.....	\$1,409,028 \$1,205,373	\$11,797,804 \$10,182,702
Coal traffic.....	51,404 149,442	717,372 790,407
Steam coalers.....	57,004 40,172	594,471 487,202
Richmond barges.....	25,415 13,687	149,514 92,728
Total R. R. Co. \$1,542,911	\$1,408,074	\$13,259,051
Coal & Iron Co. 1,054,203	910,521	8,136,395
Total.....	\$2,577,114	\$22,395,446
Traffic:		
Passengers.....	784,429 571,250	7,233,559 5,905,221
Tons merchandise.....	531,760 298,819	4,328,798 2,898,807
Tons coal.....	852,200 695,333	7,369,885 5,105,332
Tons coal on col'rs.....	54,061 41,436	551,775 526,157
Tons coal mined:		
By Coal & Iron Co. 440,464	299,268	3,880,960 2,349,018
By tenants.....	140,325 133,297	1,168,001 956,126
Total.....	580,789 432,565	5,048,961 3,305,144

For the month the receipts of the Railroad Company show an increase of \$184,237, or 9.5 per cent., and those of both companies an increase of \$257,919, or 11.1 per cent. For the eleven months the increase is \$1,705,952, or 14.8 per cent., for the Railroad Company, and \$3,779,851, or 30.3 per cent., for both companies. The great increase in passengers and merchandise is largely due to the new leased lines.

Pittsburgh, Cincinnati & St. Louis.—The following statement is published for the nine months ending Sept. 30:

	1879.	1878.	Increase.	P. c.
Gross earnings.....	\$2,441,860	\$2,302,358	\$139,502	6.1
Expenses.....	1,488,019	1,408,140	80,479	5.7
Net earnings.....	\$953,841	\$894,218	\$59,623	6.6
Interest accrued.....	616,884	610,955	5,929	1.0
Surplus.....	\$336,957	\$283,263	\$53,694	18.7

For September the earnings were \$382,835 gross and \$218,187 net, against \$280,531 gross and \$130,713 net for September, 1878. Earnings include interest received on equipment; expenses include rent of Mongabala Extension in Pittsburgh and interest on car-trust cars.

Pittsburgh, Titusville & Buffalo.—It is reported that negotiations are in progress for the consolidation of this company with the Buffalo, Chautauqua Lake & Pittsburgh, formerly the Buffalo, Corry & Pittsburgh. The Pittsburgh, Titusville & Buffalo owns a line from Corry, Pa., by Oil City to Irvineton, 95 miles, with a branch from Titusville to Union, 25 miles; the Buffalo, Chautauqua Lake & Pittsburgh road extends from Corry, Pa., to the Lake Shore at Brocton, N. Y., 43 miles.

Portland & Ogdensburg, Vermont Division.—The Receivers have concluded an arrangement with the Connecticut & Passumpsic Rivers Company for mutual interchange of business. It is expected that this will divert some business from the Maine division of the road.

Railroad Mail Service.—A dispatch from Washington, Nov. 6, says: "Col. W. B. Thompson, Superintendent of Railway Mail Service, has completed his annual report for the last fiscal year. It exhibits an increase of over 400,000 pieces of mail matter handled on the postal cars during the 12 months ended June 30, last, the aggregate being nearly 2,650,000,000, or about 20 per cent. more than in preceding year. Superintendent Thompson adduces in detail many considerations to show the necessity of increased appropriations for this branch of the postal service. In support of a recommendation for means to employ additional mail route messengers he says: 'Railroads are being built in all parts of the country, and the mileage is increasing more rapidly than was anticipated, and, in view of the increasing prosperity of the country, will doubtless continue to gain in a much larger ratio in the immediate future. Where there is a railroad in operation the public very properly demand that it should have the benefit of an agent upon it, if not more than 30 or 40 miles in length. The first agents appointed on a new road are almost invariably mail route messengers, which increases the demands on the appropriation.' He also argues that there is great need for an increase in the appropriation for local mail agents. He says: 'These agents are now required to receipt for and transfer registered mail in addition to their other duties, which greatly increases their work and requires them to assume a heavy responsibility, for which a large percentage of them do not receive an adequate remuneration for the labor performed. There are many railroad junctions which the good of the service demands should be provided with local agents. There is no branch of the service more important than this, yet its merits have in a measure been overlooked.'"

"The registration of third-class mail matter has largely increased the work on the postal cars, and Superintendent Thompson is of the opinion that clerks should be provided for on all the great through lines, whose only duty it should be to receive, receipt for, and take charge of the registered mail. This valuable class of mail matter, he says, is growing

rapidly, and becoming a very important part of the service. In view of the increasing wants of the postal-car service, and of the fact that there are a great number of very competent and faithful men who deserve promotion, but who cannot be promoted unless the department has more money at command, the Superintendent asks for an increase of the amount now appropriated for railway post office clerks from \$1,350,000 to \$1,450,000. He also requests an increase of \$100,000 in the appropriation for route agents. Heretofore the pay of these agents has been graded according to the average number of miles run daily, but during the past year it became an absolute necessity to reduce nearly all of them to the minimum of \$900 per annum, (the maximum compensation authorized by law being \$1,200 per annum,) in order to avert the creation of a deficiency.

"There is a growing need and a pressing demand for 'double daily route agent service on the more important lines of that class. Having given this matter mature consideration, I have to respectfully recommend that you ask for an appropriation of \$1,225,000 for the fiscal year ending June 30, 1881.' The total number of route agents now employed in the service is 1,193; the railway postal clerks number 1,091, and there are 247 mail messengers and 134 local agents. Superintendent Thompson calls attention to, and earnestly indorses, the recommendation of his predecessor, Superintendent Vail, that authority be granted by Congress for the department to reclassify all the employees of the railway service, and that the appropriation be made in gross, instead of as at present, for clerks, route agents, etc., separately. The clerks could thus, it is said, be more uniformly graded, and much dissatisfaction avoided, which now arises from the distinction in designation and pay when there is none in the work.

"Accompanying the report is a list of casualties, showing the great risk of life and limb incurred by the employees of the railway mail service in the performance of their duties. During the last fiscal year there were 35 railway accidents on postal lines, by which four clerks were killed and a large number seriously injured and maimed, in some cases being unable to perform duty for months.

"The Superintendent reports in detail the various extensions and enlargements of mail service effected during the fiscal year, and states that the additional facilities and improved schedules, as well as the continuance of harmonious relations with the railroads, were procured by means of the special fund which Congress placed at the disposal of the Postmaster-General. He says it has been of incalculable benefit to the service, and he hopes that Congress will make renewed provision to enable the department to continue the present facilities. In conclusion, Superintendent Thompson warmly commends all the employees of the railway mail service, 'from the highest to the lowest, for the untiring zeal and energy displayed by them in the execution of their arduous duties.' 'On their promptness, care and watchfulness,' he adds, 'are dependent interests of great magnitude, and I can safely say that the trust reposed in them has not been betrayed.'"

Rome, Watertown & Ogdensburg.—The car shops at Rome, N. Y., were burned down on the morning of Nov. 21, with all the machinery and workmen's tools, a passenger car, 11 freight cars and a snow-plow. A considerable stock of lumber was also destroyed, and the loss is estimated at \$35,000; it is covered by insurance. The building, of brick walls of which are still standing, was 94 by 230 ft., and was built about 15 years ago. It is thought that it will not be rebuilt, as the company has other buildings that can be used.

St. Louis & Southeastern.—In the United States Circuit Court in Louisville, Nov. 21, a decree was entered finally confirming the sale of the Kentucky Division to the Louisville & Nashville Company. The report of the Special Commissioner was also approved.

It is reported that the Nashville, Chattanooga & St. Louis Company is negotiating with the bondholders for a controlling interest in the St. Louis Division. The company has already begun work on the completion of its independent line from Nashville to Owensboro and Evansville, and desires, it is said, to control the management of the whole line to St. Louis, which would enable it to turn the through traffic from the Louisville & Nashville to its own line.

Sandy River.—This road is now completed to Phillips, Mo., 18 miles from Farmington, the starting point. Regular trains began to run last week. Phillips will be the terminus for a time, but the intention is to build through to the Rangeley Lakes hereafter. The road is of 2 feet gauge, and the equipment is the same as was formerly in use on the Billerica & Bedford road.

Sault Ste. Marie & Eastern.—Formal notice has been given that application will be made to the Dominion Parliament, at its next session, for an act to incorporate a company with the power to build and operate a line of railroad from Sault Ste. Marie eastward, to connect with the Canada Central and Ontario & Pacific Junction railways at or near Lake Nipissing.

Springfield & Northeastern.—Negotiations are in progress for the sale or lease of this road to the Boston & Albany. The sale cannot be made without special authority, and an act to authorize it is to be asked from the Massachusetts Legislature. The road extends from Springfield, Mass., to Athol, 48½ miles. It was originally the Athol & Enfield, taking the name of Springfield, Athol & Northeastern when extended to Springfield. It was sold under foreclosure and the present company organized a few months ago. The object of the Boston & Albany in securing it is said to be to prevent its use to give the Massachusetts Central a line into Springfield.

Terre Haute & Southeastern.—This road is now completed and opened for business to Worthington, Ind., on the Indianapolis & Vincennes road, 40 miles southeast from Terre Haute and 14 miles beyond the old terminus at Markland. The road was formerly the Cincinnati & Terre Haute and was sold under foreclosure in January, 1878, when it was bought in by the bondholders. They organized the present company last spring and have since built the extension.

Texas & Pacific.—The Philadelphia *North American* of Nov. 25 says: "The attention of foreign capitalists has been directed to this great enterprise, and negotiations have been in progress for some time looking to a contract for the extension of the road as far as El Paso within the next three years. Those plans are as yet incomplete, and no contract was ready for the signatures of the Board yesterday, and none of the managers could say when one would be made. Whatever is done will be without any further appeal to Congress, or without any entangling alliances with other parties.

"The business of the road has shown a large and steady increase up to the last year, when the yellow fever and the quarantine on account of that epidemic put an embargo on travel. The net earnings, which were \$393,509 in 1874, were \$882,870 in 1877, and last year \$738,629. The first year in which there was a surplus was 1877, when it amounted to \$50,089, and last year, although the gross earnings showed a falling off, the net surplus over all charges was \$105,880. The gross earnings have increased from \$1,183,313 in 1874-75 to \$2,136,143 last year. Since the end of the fiscal year

the earnings have increased very much more, as will be seen by the following table:

	Gross earnings.	Expenses.	Net, '79.	Net, '78.
June.....	\$121,808	\$91,901	\$29,957	\$23,526
July.....	157,277	91,888	65,388	35,997
August.....	188,417	102,197	86,219	45,574
September.....	233,349	100,217	133,132	65,703
October.....	307,000	138,150	168,850	111,162

Five months. \$1,007,912 \$524,355 \$483,557 \$282,035
"During the past year the capital account has been diminished \$22,500 to \$6,996,000 for 444 miles of road, or \$15,780 a mile."

Toledo, Peoria & Warsaw.—The decree of foreclosure entered last week in the United States Circuit Court in Chicago directs that, unless the company pays up all indebtedness within 20 days the Master shall proceed to sell the road, after giving notice, and shall apply the proceeds to payment of costs, etc., and then to satisfaction of the mortgage lien. The \$416,000 Peoria & Oquawka bonds outstanding are decreed to be a prior lien on the road east of Peoria, and the contract under which the rent paid by the Illinois Central for the use of part of the road is applied to payment of these bonds to be a valid and continuing contract. The amounts due under the various mortgages are adjudged as follows: Eastern Division, first mortgage, 1,600 bonds, amount now due, \$1,986,535.32; Western Division, first mortgage, 1,800 bonds, \$2,214,077.91; Western Division, second mortgage, 1,201 bonds, \$1,788,649.80; consolidated mortgage, 1,500 bonds, \$2,444,817.65. The amount remaining from the proceeds of the sale is to be divided between the bondholders in the proportion of $\frac{1}{10}$ to the Eastern Division first-mortgage bonds, and $\frac{9}{10}$ to the Western Division first-mortgage bonds. In the somewhat improbable case of any surplus remaining after satisfying these mortgages, such surplus is to be distributed in the proportion of $\frac{1}{10}$ to the second mortgage, and $\frac{9}{10}$ to the consolidated bonds. The decree finally finds that the company is entitled to the perpetual use of the road between Hamilton and Warsaw, in common with Hiram Thornton and his heirs, on the terms of the contract made July 17, 1857, by the old Mississippi & Wabash Company.

Receiver Hopkins reports as follows for September and October:

Cash on hand Sept. 1.....	\$42,749.63
September receipts.....	164,038.17
October receipts.....	184,280.27

Total.....	\$391,038.07
September disbursements.....	\$188,970.10
October disbursements.....	158,310.46
	347,280.56

Cash on hand, Nov. 1.....\$43,757.51
In September the disbursements exceeded the receipts by \$24,981.93; in October, the receipts were greater by \$35,939.81, making an excess of receipts over disbursements of \$1,007.88 for the two months.

Vincennes, Petersburg & Owensboro.—Meetings are being held and efforts made to secure subscriptions for this road, which is to run from Vincennes, Ind., southwest to Petersburg, and thence southward to the Ohio River opposite Owensboro, Ky. The distance is about 70 miles, and the road will pass through some good coal country.

Virginia & Truckee.—It is stated that materials have been purchased and arrangements made by this company to build its branch line from Mound House, Nev., by Mason Valley to Bodie, Cal.

Walkill Valley.—This company is said to be negotiating for the control of the Goshen & Deckertown road, now worked by the Erie under a lease which will expire Jan. 1. The road extends from Goshen, N. Y., to Pine Island, 13 miles, and an extension of four miles would connect it with the line now under construction from Warwick to McAfee Valley. This connection would enable the Walkill Valley to secure an outlet to New York over the New Jersey Midland from Hamburg.

Wheeling & Lake Erie.—As already noted, this project has been revived and a contract let to C. R. Griggs, of New York, subject to approval by the stockholders. Under this contract the stock subscriptions are to be used to complete the grading and the contractor is to supply rails, bridges, buildings and equipment for \$30,000 a mile, one-half in stock and one-half in 6 per cent. first-mortgage bonds. The company is to retire the old bonds and is to be allowed to use \$84,000 of the new bonds to settle outstanding debts. It is thought that the unpaid stock subscriptions will be sufficient to provide for the grading.

ANNUAL REPORTS.

The following is an index to the reports of companies which have been reviewed in previous numbers of this volume of the *Railroad Gazette*:

Page.	Page.
Allegheny Valley.....	282
Atchison & Nebraska.....	365
Atchison, Topeka & Santa Fe.....	377
Atlanta & Charlotte Air Line.....	304
Atlanta & West Point.....	505
Atlantic & Great Western.....	178, 179
Astoria, Me. & Ohio.....	532
Baltimore & Ohio.....	629
Baltimore & Potomac.....	382
Boston & Albany.....	78, 602
Boston, Clint. & N. Y. R.....	1
Boston, Concord & Montreal.....	382
Boston & Lowell.....	40
Boston & N. Y. Air Line.....	352
Boston, Rev. Beach & Lynn.....	601
Bur. & Mo. River in Nebraska.....	518
Calro & St. Louis.....	305
Camden & Atlantic.....	372
Central of Iowa.....	151
Central of New Jersey.....	121
Central Pacific.....	362, 575
Charlotte, Col. & Augusta.....	121
Chattanooga & Cleveland.....	205
Chesapeake & Ohio.....	292
Chesapeake & Ohio Canal.....	392
Chicago & Alton.....	165
Chi. & Burlington & Quincy.....	196
Chicago & East Illinois.....	192, 614
Chicago & Lake Huron.....	410
Chicago, Mil. & St. Paul.....	232
Chicago & North Western.....	450, 457
Chi. Rock Island & Pac.....	372, 379
Cin. Hamilton & Dayton.....	384
Cin. & Mus. Valley.....	532
Cin. Sandusky & Cleveland.....	614
Clev. Col. & Ind. Ind.....	166
Clev. Mt. Vernon & Dela.....	491
Cleveland & Pittsburgh.....	218
Cleveland, Tus. Val. & Wheeling.....	426
Col. Chic. & Ind. Cent. (P. C. & St. L.).....	205
Col. & Hocking Valley.....	320
Columbus & Toledo.....	320
Concord.....	292
Concord & Claremont.....	423
Connecticut Minor Railroads.....	492
Conn. & Passumpsic Rivers.....	462
Connecticut River.....	66, 602
Cumberland Valley.....	506
Dakota Southern.....	66
Dayton & Northwestern.....	69
Dayton & Southeastern.....	106
Delaware.....	54
Delaware & Bound Brook.....	248
Delaware & Hudson Canal.....	276
Del. Lack. & Western.....	77
Detroit & Bay City.....	348
Louisville & Nashville.....	547
Maine Central.....	179
Ma'ne Minor Railroads.....	548
Manchester & Lawrence.....	318
Marquette, Houghton & Ont.....	392
Massachusetts Minor Railroads.....	446
Memphis & Charleston.....	191, 622
Michigan Central.....	362, 369, 277
Michigan R. R. Commissioner.....	553
Minnesota Minor Railroads.....	532
Mississippi & Tennessee.....	245
Missouri, Kansas & Texas.....	434
Mobile & Girard.....	384
Mobile & Montgomery.....	530
Mobile & Ohio.....	505
Montpelier & Wells River.....	158
Morrin & Essex.....	248
Nashua & Lowell.....	352
Nashville, Chattanooga & St. L.....	491
Natchez, Jack. & Col.....	247
New Jersey Midland.....	150
New Jersey Minor Railroads.....	575
N. Y. Lake Erie & West.....	48
New York Minor Railroads.....	618
New York & New England.....	122
N. Y. N. H. & Hartford.....	40
N. Y. Providence & Boston.....	12
New York State Engineer.....	127
Northeastern (S. C.).....	40
Northern Central.....	121
Northern New Hampshire.....	457
Northern Pacific.....	562
North Pennsylvania.....	231
Ogdensburg & Lake Champlain.....	365
Ohio & Mississippi.....	348
Old Colony.....	629
Oregon & California.....	296
Paducah & Elizabethtown.....	362
Panama.....	248
Pennsylvania.....	136
Pennsylvania Company.....	218, 434
Pennsylvania & New York.....	292
Pensacola & Perdido.....	341
Philadelphia & Reading.....	30
Phila. W. & Baltimore.....	24
Pitts. W. & St. Louis.....	305
Pitts. Ft. W. & Chi. (Fenn. Co.).....	211, 215
Pitts. Titusville & Buffalo.....	390
Pitts. W. & Ky.....	562
Portland & Ogdensburg.....	341
Providence & Worcester.....	262, 630
Pullman Palace Car Co.....	517
Quebec, Mont. Ott. & Ouel.....	423
Richmond & Danville.....	91
Richmond, Fred. & Potomac.....	78
Rick Island & Peoria.....	248

LOCOMOTIVE RETURNS, AUGUST, 1879.

Master Mechanics of all American railroads are invited to send us their monthly returns for this table.

NAME OF ROAD.	MILEAGE.	MILES RUN TO.	AVERAGE NO. OF PASSENGERS.	AVERAGE COST PER PASSENGER.	COST PER MILE IN CENTS FOR					AVERAGE COST OF
					Repairs.	Fuel.	Shops.	Mechanics.	Engineers & Wipers.	
Allegheny Valley, River Division*.	100 35	85,023	2,324	40.80	90.01	21.80	0.587	4.80	2.95	0.41
Low Grade Div.	100 18	85,150	1,842	34.14	24.47	22.70	0.610	2.70	2.00	0.53
Atlantic & Great Western, Island 2d	100 77	930,576	4,332	30.92	17.74	18.9		3.24	5.13	0.43
Third and Fourth Div.	100 19	200,103	4,041	28.73	25.93	18.50		3.53	5.05	0.38
Atlantic & Gulf.	100 22	125,783	2,076	30.46	24.41	23.10		3.92	3.74	0.41
Camden & Atlantic.	100 22	125,783	2,076	30.46	24.41	23.10		3.92	3.74	0.41
Central Pacific, Western Div.	100 32	82,742	2,588	45.67	17.8			6.51	12.90	0.46
Northern & San Pablo Div.	100 30	90,982	2,092	37.97	21.80			3.17	15.85	0.40
Tulare Div.	100 19	90,339	2,160	37.04	21.23			4.18	10.02	0.41
Los Angeles, Yuma, San Diego & Wilmington Div.	100 27	88,979	2,553	57.02	18.10			6.65	10.17	0.44
California Pacific Div.	100 18	88,324	2,548	36.30	20.32			3.10	16.37	0.40
Stockton & Copperopolis.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Sacramento Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Oregon Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Truckee Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Humboldt Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Salt Lake Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Chicago & Eastern Illinois.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Chic. & La Fayette & Chicago.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Chic. & North Western.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Cleve., Col. & Ind., Col. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Indianapolis Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Cincinnati Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Cleveland & Pittsburgh.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Cleveland, Tus. Valley & Wheeling.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Dela., Lacka. & Western, Bloomsburg Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Grand Rapids & Indiana.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Green Bay & Minnesota.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Houston & Texas Central.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Illinois Central, Chicago Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
North Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Springfield Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Iowa Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Indianapolis, Mich. & Ind. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Jeffersonville, Madison & Ind.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Kan. City, St. Jo. & Council Bluffs.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Kansas Pacific.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Laurens & Mich. So. Buffalo Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Eric Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Toledo Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Mich. Southern Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Little Rock, Miss. River & Texas.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
North Cent. Minn. & Can. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Second Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Memphis Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Nash. & Decatur Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
South & North Alabama.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Evansville, Hen. & Nash. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Marquette, Houghton & Ontonagon.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Missouri, Kansas & Texas.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Little Rock, Miss. River & Texas.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Philadelphia, Pa. & N. York Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Amboy Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Belvidere Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Chicago & North Western.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Middle Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Pittsburgh Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Tyros Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
West Penn. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Lewistown Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Bedford Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Frederick Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Pittsburgh, Pa. & N. York Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Pitts., Ft. Wayne & Chi., East. Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Western Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Pitts., Cin. & St. Louis, Little Miami Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Pitts., Cin. & St. Louis, Little Miami Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Quebec, Montreal, Ottawa & Central, Western Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
St. Louis & Southern.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
St. Louis & Southern.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
West Jersey Div.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Year ending Aug. 31.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40
Chicago & Eastern Illinois.	100 26	84,933	2,371	38.89	20.32			3.10	16.37	0.40

This company owns a main line from Boston to Providence, 44 miles, all double track; the West Roxbury Branch, 5.37 miles; the Dedham Branch, 2.23 miles; the Stoughton Branch, 4.11 miles; and the India Point Branch, 8.05 miles, making 63.75 miles owned. It leases the Attleborough Branch road, 4 miles, making 67.75 miles worked. Its latest report is for the year ending Sept. 30, 1879.

The general account is as follows:

Stock (\$62,745 per mile).....	\$4,000,000.00
Debt (\$14,431 per mile).....	920,000.00
Accounts and balances due.....	67,254.35
November dividend.....	140,000.00
Profit and loss.....	434,503.52
Total.....	5,501,757.87

Road, equipment and real estate (\$77,051 per mile)..... \$4,911,990.51

Prov. Warren & Bristol stock..... 258,085.00

Union Freight R. R. stock..... 70,014.42

Cash, materials and receivables..... 311,787.94

The funded debt consists of \$500,000 bonds, and \$420,000 long notes; \$80,000 of the notes were paid off during the year, reducing their amount from \$400,000 to \$420,000.

The traffic for the year was as follows:

Train mileage.....	1878-79	1877-78	Inc. or Dec.	P. C.
Passengers carried.....	811,853	800,010	I.	1.46
Freight.....	3,206,189	3,213,189	D.	0.21
Passenger mileage.....	37,959,303	37,557,491	I.	1.07
Tons freight carried.....	593,340	569,751	I.	4.11
Tonnage mileage.....	16,561,400			

The increase in passenger mileage with the decrease in number of passengers indicates an increase in through travel, while the falling off in passenger earnings shows a reduction in rates. The changes were probably partly due to the very low rates on the rail-and-boat business between Boston and New York, of which this company carries a large share.

The earnings for the year were as follows:

Passengers.....	1878-79	1877-78	Inc. or Dec.	P. C.
Freight.....	\$605,109.78	\$734,505.86	D.	17.83
Express and mail.....	424,179.43	417,302.30	I.	1.65
Rents.....	30,294.35	43,232.14	D.	30.37
Total.....	\$1,178,583.56	\$1,205,040.30	D.	2.23
Expenses.....	793,613.04	847,927.53	D.	6.74
Net earn.....	\$384,970.52	\$357,112.77	I.	7.53
Gross earn. per mile.....	17,390.07	17,806.90	D.	2.33
Net earn. per mile.....	5,677.12	5,291.36	I.	7.33
Per cent. of expenses.....	67.36	70.29	D.	4.29

Expenses include taxes, insurance and also the rent of the Attleborough Branch, which was last year \$10,917.27. The decrease in earnings was much more than offset by the very considerable reduction in expenses.

The income and profit and loss accounts may be stated as follows:

Net earnings for the year.....	\$384,970.52
Balance of interest account.....	\$53,249.12
Dividends, 4% per cent.....	280,000.00
Surplus for the year.....	\$71,729.64
Balance of profit and loss, Sept. 30, 1878.....	363,127.39
Balance, Sept. 30, 1879.....	\$434,503.52

Two dividends were declared during the year—one of 3 per cent., paid May 1, 1879, and one of 8 1/2 per cent., payable Nov. 1, 1879, making 6 1/4 per cent. in all. The surplus for the year was equivalent to 1 1/4 per cent. more on the stock.

Dividends of \$5,740 on Union Freight Railroad stock and of \$8,580 on Providence, Warren & Bristol preferred stock were received and credited respectively to interest account, and to reduction of valuation of stock held. The last-named road, in which this company holds 3,242 out of 4,373 shares, is expected to be a source of revenue hereafter. The mortgage of \$50,000 has been paid off, and the only debt is now \$20,000 due this company.

During the year a new locomotive and 16 dump cars were bought; 4 1/2 miles of steel rails and 10 miles of new ties laid and the road-bed generally improved. All of the main line from Boston to Providence is now of steel except 5 1/2 miles, and there are 82 1/2 miles of steel in the main track, and 6 1/2 miles in the branches. The last wooden bridge of importance in the main line—over Ten-mile River at Dodgeville—is now being replaced by two arches of masonry. This is a safeguard against fire and freshet, and will be completed in the current year at a cost of about \$18,000.

The report thus refers to the negotiations with the Boston & Albany, concerning which many reports have been circulated:

"In last year's report it was stated that the government of the Boston & Albany road had been notified, 'that whenever they had any thought of making a change in their passenger terminus in Boston, the Boston & Providence station offered ample accommodations for the offices of both corporations and for the convenience of travelers over each road.'

"This led to several conferences during the last spring between the representatives of the two boards of directors, and to some correspondence.

"Meanwhile, a careful account of stock and property was made. The result showed that, owing to the outlays of

former years, represented in a large measure by your debt, and by the enhanced value of the real estate occupied and enjoyed by the Boston & Providence corporation, the value of the property was far in excess of any present market value of the stock, even after making liberal deductions from assessed values.

"Aware that any propositions could only be consummated by the votes of the stockholders, and by legislative action, the subjects of the joint occupancy of your passenger station and of a perpetual lease of the entire property of your corporation were considered, but with no satisfactory result to the gentlemen representing either company.

"Later, in answer to a verbal inquiry, 'what the directors of the Boston & Providence Corporation would consider fair terms for the transfer of its entire franchise to the Boston & Albany Company,' at a meeting of the board held July 1 last, every member being present, your President was instructed by a unanimous vote to say: 'That the present directors prefer to lease one-half of all the premises of the corporation to Dartmouth street, including the freight station, your company [the B. & A.] to accommodate the Boston & Providence freight at Albany street.'

"The terms of such lease they are willing to leave to three referees, you presenting a list from which we shall select one, this corporation to present a list of names from which you shall select another, and if unable to agree upon the third, the two referees to make their own selection.

"On the other hand, if this proposition be not acceptable, in view of the facts, that while the Boston & Providence Corporation has been keeping its road in most thorough condition, substituting iron for wood (being engaged at the present moment in replacing with masonry the last wooden structure in its main track), and has with reduced dividends been constantly and materially reducing its debt, the directors are not willing to name a price of sale.

"A proposition to exchange share for share, and so consolidate the two properties, would be submitted to the stockholders at the next annual, or any special meeting.

"President Lincoln replied, under date of July 17, in a courteous letter of three pages, that after a 'very careful consideration by the managers of this [the B. & A.] road,' neither of these propositions could be entertained.

"Since this date there has been no official correspondence."

Valley, of Virginia.

This company owns a line from Harrisonburg, Va., to Staunton, 86 miles, with an incomplete extension from Staunton to Salem, about 90 miles, on which a large amount of costly work has been done. The following statements are from the report made at the recent annual meeting for the year ending Sept. 30, 1878.

The earnings for the year were as follows:

Gross earnings.....	1878-79	1877-78	
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